The eLearning Guild's
Handbook of
e-Learning
Strategy

Foreword by Marc Rosenberg

Chapters by Kevin Moore, Frank Hanfland,
Patti Shank, Lisa Young, Lance Dublin,
Ryan Watkins, Michael Corry

Bill Brandon, Editor

THE eLEARNING
GUILD
™

Other FREE Digital e-Books by The eLearning Guild include:
The eLearning Guild's Handbook on Synchronous e-Learning
834 Tips for Successful Online Instruction
328 Tips on the SELECTION of an LMS or LCMS
339 Tips on the IMPLEMENTATION of an LMS or LCMS
311 Tips on the MANAGEMENT of an LMS or LCMS

Table of Contents

Strategy Matters

By Marc J. Rosenberg

Over the years, when we've thought about "e-Learning strategy," the focus was too often on the "e-Learning" part and less on the "strategy" part. We bought tons of technology without considering how or if the organization could use it. We built or bought online courseware without a firm understanding of the needs it might serve or the specific benefits it would bring. We focused on our tools before we focused on our clients. And we wondered why we had so much trouble getting the organization to embrace what we were doing.

Now we are beginning to put things in the right balance. *The eLearning Guild's Handbook of e-Learning Strategy* resets our compass, giving e-Learning practice and e-Learning strategy equal weight, as it should be.

There's plenty in this book for a good grounding in e-Learning strategy. But what about strategy in general? What should you consider as you read each chapter? What constitutes strategic thinking and strategic action? For me, it's about three things: differentiating strategy from tactics, developing a long-term view, and defining success.

Differentiating strategy from tactics

"Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat."

Sun Tzu, *The Art of War*

"Implement e-Learning in the business" is a noble and appropriate strategy, but how do we get there? "Getting there" requires tactics and operational objectives that tell us what to do and when to do it. Without the right tactics, we face obstacles we should have anticipated and problems we could have avoided. Without solid tactics, our progress will surely be marred with detours and wasted time. One year goals turn to three, and we miss opportunities and deplete goodwill.

Likewise, and too often, we have tactics without strategy, and we end up with lots of activity with little value to speak of. We have great infrastructure and lots of product, but little following. At the end of the day, we can't explain, in *strategic* business language, why we did what we did. Without the support a solid strategy would have provided, our efforts are seen as unsustainable and non-contributory. We expend years of work, and again miss opportunities and deplete goodwill.

Only a sound, endorsed strategy, *and* a solid tactical plan, will result in the kind of e-Learning success we want. The strategy tells us why we need to deploy e-Learning and what the benefits will be, and the tactics, linked to that strategy, tell us how we will get there.

Developing a long-term view

"Perception is strong and sight is weak. In strategy, it is important to see distant things as if they were close and to take a distance view of close things."

Miyamoto Musashi, Famous Japanese Samurai

Strategy requires a long-term view. It represents a desired state and is almost never accomplished in a year or even two. Our compulsion with quarterly results and annual budgets are rarely compatible with our strategic intent. We might be able to install an LMS and deploy courseware relatively quickly, but how long before it bears fruit? How long before employees not just try it out but actually prefer it? How long before we truly embrace this fundamental shift in how we learn?

We need to find ways to think of e-Learning strategy as a new venture, an initiative that could take years to fulfill, but as long as there is progress, we can sustain the journey. We need to keep the end – business value – in mind and not be too distracted by the constant change in technology or methodology. It may be fun and even worthwhile to keep up with the latest innovations, but doing so cannot be our reason for being. If we become too focused with the here and now, we may lose our way from the strategic path we have set for ourselves.

Defining success

"However beautiful the strategy, you should occasionally look at the results."

Winston Churchill

A solid e-Learning strategy is essential, but, ultimately, we have to deliver. Strategy and results are inseparable. Strategy points the way and results define the destination. Results are owned by those who set the strategy and who will most likely pay for and benefit from it. This speaks to an essential element of the strategic process – partnering with the client. The client, be it a customer, a business unit president, or the CEO, owns the strategy with us and, with our help, defines the success criteria.

So we come full circle. We develop a long-term strategy that defines what we want to accomplish down the road. We develop a tactical implementation plan to get there, and we define what success is so that we know when we have arrived. We are both persistent and patient.

Strategy is for everyone

The underlying message is clear: strategy permeates all aspects of e-Learning planning, implementation, evaluation and satisfaction. This matters to everyone in the organization. It is as necessary in determining how to build the best online course as it is in directing the overall organizational initiative.

Each chapter in this e-Book applies strategy to e-Learning from a different point-of-view:

Kevin Moore talks about the importance of a strategic perspective. This is critical for maintaining an effective relationship between the e-Learning function and the organization it serves. When he suggests that "the e-Learning strategy lives through the learning strategy, which in turn is deeply embedded in the organizational strategy," he is clearly and rightly challenging us to be sure that what we do is in line with where the organization is going.

Frank Hanfland focuses on technology strategy, clearly an important component of successful e-Learning. While we don't want to rely solely on our technology to get us to our goals, and we sure-

ly don't want to be driven by it, we certainly can't get there without it. Hanfland uses the implementation of a learning management system (LMS) as a case study of what to consider. His approach combines technical as well as change management considerations, for as we all know, technology means nothing if the organization refuses to use it.

Lance Dublin picks up on Hanfland's concern about change management in his chapter, which is devoted entirely to this important subject. Dublin urges us not to forget that we have to help people come to understand and ultimately prefer this new way to learn, because if our audience rejects what we're doing, even the best programs are doomed. Noting that "this soft stuff is the hard stuff," Dublin tells us that whatever the merits of our technology and our design, success is much more likely when you have an effective change management strategy in place.

Patti Shank and **Lisa Young**, in their respective chapters, take strategic thinking down to decisions about how to build quality e-Learning and how to make the best use of e-Learning tools. Despite instructional designers' and product developers' naturally creative and production-oriented mindsets, even they can be strategic players. Both Shank and Young admonish us not to rush into any specific design strategy or tool selection decision just because it has worked before. They caution that while design, authoring, and delivery technologies are getting easier and better, it is no panacea and no substitute for solid judgment about the learning challenge at hand.

Finally, **Michael Corry** and **Ryan Watkins** recognize that learners themselves must develop their own strategies for being successful e-learners. Too often we get so wrapped up in designing and delivering e-Learning that we forget about the learners and what they need. Whether it's helping enthusiastic learners improve their comfort level with new technology, or helping reluctant learners buy into e-Learning as a preferred way to learn, we cannot see our strategy as complete without putting ourselves in their shoes.

We often think that strategy must be at the enterprise level and that we must always focus on monumental change. Granted, major organizational transformation or business success sounds more strategic, and we clearly must keep the big picture in mind, but strategic thinking – and action – is not limited to the higher-ups. Managers, developers, and others in the e-Learning organization, who have very specific responsibilities, can be strategic thinkers – and doers – if they develop appropriate goals that are separate from their tactics, take a long term view, and clearly define their success criteria.

The time has come to re-focus on e-Learning strategy, not at the expense of e-Learning technology or e-Learning methodology, but as a way to insure that our technology and methodology investments pay off. We cannot simply do our own thing, as exciting as it might be, without carefully considering the big picture and how we contribute to it. Everything we do – every decision we make – has strategic implications. In this important book, The eLearning Guild begins the conversation on just what those implications are, and how, with a solid strategy behind us, we can take control and achieve our e-Learning goals.

The eLearning Guild's Handbook of
e-Learning Strategy

By Bill Brandon, Editor

There is a subtle difference between strategy and tactics. Tactics, the everyday concern of practitioners, answers the question, "How?" How do you put a lesson together? How do you write test questions? How do you use a given software appliction to achieve a desired result? Most of the time, books and articles written for the e-Learning practitioner focus on this getting-the-job-done side of things.

Strategy, on the other hand, steps back from the day-to-day. It takes a higher-level view to answer the question, "What?" What should we be doing in order to support the organization's goals for improved performance? What design for learning best matches our situation and our learners? What software capabilities do we need to best leverage technology in solving our enduring business challenges?

Since we began operation in 2002, The eLearning Guild has attempted to balance its delivery of information, services, and resources to facilitate both strategy and tactics. This has been true of all the articles we have published in *Learning Solutions e-Magazine* and its predecessor, *The e-Learning Developers' Journal.* It has been true of the topics and speakers at our conferences and online events, in our research publications, and now in our e-Books.

This e-Book began, as all of them do, with a realization of a need in the e-Learning community, and a conversation between The Guild leadership, the editor, and the Advisory Board. What we saw was a need to better articulate a learning strategy in many organizations. Not just an *e-*Learning strategy, but a broader, more fundamental connection between learning and organizational mission, business objectives, and the proverbial "bottom line."

The intent and design of this book are based on three aims. First, we wanted the book to be more about making a plan for doing the right things, not so much about doing things right. The Guild has never taken a position that dictates, "This is the *right* way to 'do' e-Learning, and any other way is wrong." We are not taking such a position now. You will

Who should read this book?

The eLearning Guild's Handbook on e-Learning Strategy is intended for those who lead their organization's learning initiatives. You may be senior executives who are outside the traditional Human Resources/Chief Learning Officer/Training context. You may also be a "one person shop" who has to do it all when it comes to producing, leading, and promoting learning.

Note that this book is written from the larger frame of learning strategy – not just e-Learning. An organization's leadership can profit from reading Chapters 1, 2, 4, and 6 even if the organization has no current e-Learning initiatives in place.

If you are new to learning and e-Learning, you should read the entire book. Much of the insight here comes from experts who have already experienced (at first hand or through watching others) the pain of learning initiatives that were not grounded in a higher level strategy. You can learn from their experience without having to repeat any mistakes.

If you are an experienced manager or e-Learning practitioner, you can also benefit from reading this book. A great many best practices are presented here. You will be able to apply them to your curent processes and products in order to benefit from stronger strategic ties to your organization's outcomes.

notice as you read the chapters that the authors have different views on certain matters, yet they are in fundamental agreement about the vital need to figure out and document your strategy before you begin to worry about which authoring tool to use or how your templates should look.

Second, we wanted the book to have a certain "flow" to it, from high-level thinking about outcomes and processes, then transitioning to intermediate strategies having to do with people, project management, and technology. At the end, it was to be an easy step from deciding on the right things to do, back to the tactical world of procedure and day-to-day operations. While the cynical will say that no learning strategy ever survives the pilot program, successful e-Learning practitioners appreciate the wisdom of the Japanese proverb: *Vision without action is a daydream, but action without vision is a nightmare.*

Finally, we wanted a book that would offer planning methods without imposing checklists. A checklist developed by an individual practitioner, taking into account particular circumstances for a particular organization and its mission, values, and desired outcomes, is a good thing. But a generic checklist based on theory and hypothetical circumstances is a recipe for disaster.

How to use this book

The best way to approach this book is to read the first five chapters in order, and to develop your documented learning strategy as you go. You will revise your strategy several times along the way, but with each iteration you will be closer to a solid document.

The first two chapters are intended to help you develop your organization's own documented (e-)learning strategy. As Kevin Moore notes in Chapter 1, it is the absence of the connection between e-Learning initiatives and business results that account for the difficulty e-Learning initiatives – and learning initiatives in general – have in getting and keeping support and funding. Once you can demonstrate such a connection, your "seat at the table" is assured.

The next three chapters will help you bridge the gap from the highest strategic levels to your day-to-day efforts. If you try to follow the advice in these later chapters without having gone through the exercises in the first two, be warned – your efforts are in danger of failing. The guidelines in chapters 3, 4, and 5 are not *ad hoc*, generic advice. Strategy implementation must connect, through the larger strategic (e-)learning plan, to the organization's valued outcomes.

Chapter 6 is intended as a model for a document that you might want to provide to learners in your organization. It deals with personal strategy for getting the most benefit from e-Learning as a user.

It seems to me that the authors of these chapters have done an outstanding job in meeting all of these criteria. It is our hope that you will find their advice useful and that you will realize great success in creating your own e-Learning strategy.

Acknowledgments

About the Authors

Michael Corry

Michael Corry, Ph.D. is an Associate Professor and Director of the Educational Technology Leadership program at The George Washington University. Dr. Corry is intimately involved with course design and delivery as well as management of this pioneering program delivered via distance education at GWU. Dr. Corry's research interests include distance learning theory, practice, and policy, faculty development using technology, e-Learning, the integration of technology into K-12 and higher education settings, instructional design, and human-computer interaction. He has been a principal investigator on two U.S. Department of Education grants involving "Preparing Tomorrow's Teachers to Use Technology." He has numerous publications and presentations involving his research interests including two books — *E-Learning Companion: A Student's Guide to Online Success*, 1st and 2nd editions published by Houghton Mifflin and *Distance Education: What Works Well* published by Haworth Press. He has also designed and delivered workshops involving technology and e-Learning. Dr. Corry holds a Ph.D. from Indiana University in Instructional Systems Technology. Before coming to GWU he taught at Indiana University, at a high school in Utah, and was an Information Systems Consultant for Andersen Consulting/Accenture. Contact him at mcorry@gwu.edu.

Lance Dublin

Lance Dublin is an independent management consultant, international speaker, and author based in San Francisco, California and serving clients world-wide. He specializes in strategy development, program design, and implementation for corporate learning programs and organizational change management. Lance is a regular speaker and keynote presenter at regional, national and international conferences. In addition, he is the author of numerous published articles, co-author of the capstone book in ASTD's e-Learning series, *Implementing e-Learning*, and a contributor to ASTD's *Handbook of Training Design and Delivery*, Elliot Masie's *Learning Rants, Raves and Reflections*, and Marc Rosenberg's *Beyond e-Learning*. For more information, see http://www. dublinconsulting.net.

Frank Hanfland

Frank Hanfland is a senior instructional design and e-Learning consultant and has spent the past ten years on the forefront of multimedia and e-Learning development. His experience reaches back to application programming in BASIC, developing in Authorware 3 and Flash since version 3, and many other platforms to provide integrated solutions to a wide variety of industries, ranging from telecom, banking, and insurance, to hazardous waste companies. In addition to his technical expertise, Frank has a solid background in instructional design and is an advocate of using the most modern methodologies to solve an organization's human performance improvement and support requirements. Contact Frank by e-mail to frank@hanfland.us.

Kevin C. Moore

Kevin C. Moore, Ed.D., is Founding Partner, and Chief Learning Officer for Tier 1 Performance Solutions, LLC. Dr. Moore is a Performance Improvement and Instructional Design consultant. He has over sixteen years of experience designing and modifying instruction for adult learners. Kevin's experience includes needs assessments that address business needs and training requirements, physical and mental workload assessments, technology analysis, designing of performance management systems, technical and "soft" skills training design, and summative and formative evaluations of performance improvement programs. In addition, Kevin has experience with the selection of appropriate training strategies and materials to address learner characteristics, course objectives, and sequencing of courses to fit curriculum and performance needs. For the past 11 years Dr. Moore's research and work area has focused on knowledge and learning throughout organizations. Specific topic areas include: the interactions between knowledge flows, content taxonomies, business and operational goals, and technology. Kevin is a frequent keynote presenter at national conferences and is published in academic and trade journals. He holds a B.A. in Business/Organizational Communication, University of North Carolina at Wilmington, M.S. in Instructional Design and Technology, University of Kentucky, and a Doctorate in Education and Instructional Design Technology from the University of Kentucky. Contact Kevin by e-mail to k.moore@tier1performance.com.

Marc J. Rosenberg

Marc J. Rosenberg, Ph.D. is a management consultant in training, organizational learning, e-Learning, knowledge management and performance improvement. He is the author of the best-selling books, *e-Learning: Strategies for Delivering Knowledge in the Digital Age* and, *Beyond e-Learning: Approaches and Technologies to Enhance Organizational Knowledge, Learning and Performance* (Pfeiffer). Marc is a past president of the International Society for Performance Improvement (ISPI). He holds a Ph.D. in instructional design, plus degrees in communications and marketing. Dr. Rosenberg is a recognized thought leader in the field. He has spoken at The White House, keynoted numerous professional and business conferences, authored more than 40 articles and book chapters in the field, and is a frequently quoted expert in major business and trade publications. More information is available at www.marcrosenberg.com.

Patti Shank

Patti Shank, Ph.D., CPT, is a widely recognized instructional designer whose company helps others design and build good online and blended courses and performance support. She is the co-author of *Making Sense of Online Learning* and the editor of *The Online Learning Idea Book*. You can reach her through her Website: www.learningpeaks.com.

Ryan Watkins

Ryan Watkins, Ph.D. is an associate professor at The George Washington University in Washington, D.C. He is an author of *Performance By Design: The Systematic Selection, Design, and Development of Performance Technologies*, *5 e-Learning Activities: Making Online Courses Interactive*, and *E-Learning Companion: A Student's Guide to Online Success*. In addition, he has co-authored two books on educational planning and more than 60 articles on instructional design, strategic planning, needs assessment, distance education, and performance technology. Dr. Watkins is an active member of the International Society for Performance Improvement (ISPI) and was a vice president of the Inter-American Distance Education Consortium (CREAD). In 2005 Ryan was a visiting scientist with the National Science Foundation. For more information please visit http://www.ryanrwatkins.com or http://www.how2elearn.com.

Lisa Young

Lisa Young is the Director of Measurement and e-Learning at HORN, a performance consulting firm, where she is responsible for the design and development of complex, highly customized learning programs which include multi-level assessment to illustrate ROI. She has extensive experience analyzing potential e-Learning and blended learning opportunities based on organizational infrastructure, environment, and content, to ensure that the training methodology utilized best suits the proposed training objectives. She is a published author, and has presented at numerous conferences in the fields of adult education, online learning, e-Learning management, wearable technology, communities of practice, and telementoring. Lisa is currently completing her Ph.D. in Education at OISE/University of Toronto. Contact Lisa by e-mail at lyoung@horn.com.

Adobe eLearning solution for rapid training

Rapidly create, manage, deploy, and track the effectiveness of highly engaging online training that virtually anyone can access instantly

With this solution, you can:

- Rapidly develop, update, and deliver engaging self-paced training
- Administer formal assessments and surveys, and measure the effectiveness of on-demand presentations
- Measure the effectiveness of course content and analyze training results
- Increase the effectiveness of instructors, and easily conduct virtual classes
- Customize the look and feel of eLearning experiences
- Manage virtually all facets of employee, partner, and customer training
- Enhance your existing corporate user and learning management systems

Organizations today face tremendous financial, logistical, and other challenges when training employees, channel partners, and customers: scarce training resources; complex eLearning solutions that make it difficult for all but technically minded training professionals to develop eLearning courses and curricula; costly custom eLearning solutions that require long development times; potential incompatibilities with existing user and learning management systems; and, of course, bland, lifeless training sessions that fail to produce results because they fail to engage learners.

Cost-effectively transfer maximum knowledge in minimum time

With the Adobe eLearning solution for rapid training, you can overcome these challenges cost-effectively and productively while increasing your ROI through faster training and better results. This solution has what training professionals need to address a wide range of training needs—development of standards-compliant content, on-demand or virtual classroom deployment, and reliable formal assessments and reporting—at a fraction of the time and cost of traditional eLearning systems. It also provides comprehensive curriculum and content management capabilities and integrates with common learning management and user management systems to help reduce application management costs.

Use one solution for all your training needs

Avoid the hassle of dealing with multiple solution offerings. With the Adobe eLearning solution for rapid training, you can build a streamlined, fully integrated training solution that includes Adobe® Acrobat® Connect™ Professional software for virtual classroom sessions; Adobe Presenter for easy Microsoft PowerPoint authoring of self-paced training courses and on-demand multimedia presentations; Adobe Connect Training for creating and managing eLearning courses and curricula; and Adobe Connect Events for managing and tracking users of large online courses.

Rapidly deliver engaging, self-paced training

With this solution, nontechnical subject matter experts can leverage their Microsoft PowerPoint skills to create engaging multimedia experiences. Using their desktop computers and a microphone, trainers can easily add voice-over narration to their content from within PowerPoint. Built-in audio editing tools make it easy to isolate and cut out embarrassing pauses or slurred speech. And integrating rich media such as talking head videos, animations, or simulations is as easy as selecting a command from the Insert menu. Finished courses can be published at the click of a button—courses are automatically converted to the Adobe Flash® format and delivered live or on demand using Adobe Flash Player, which already is installed on more than 97% of Internet-connected desktops worldwide, so learners can access them instantly without cumbersome software downloads, virtually anytime and anywhere.

Administer formal assessments and gauge the effectiveness of courses

With the Adobe eLearning solution for rapid training, trainers don't need an IT department or database administrator to help them assess learners' skills and progress or analyze the effectiveness of their courses. Trainers can integrate quizzes with course content using a range of question types—including short answer, fill-in-the-blank, true/false, matching, and Likert rating scale—add pass/fail criteria, and use question branching and custom audio-visual feedback to guide learners in their progress. Likewise, they can gauge the effectiveness of their content using a simple, web-based interface to generate custom reports that provide slide- and question-level feedback and help pinpoint content that may have to be revised to ensure trainees get the information they need.

Provide instant access to online meetings and virtual classes

Trainers can also use this solution to set up virtual classrooms and conduct cost-effective collaborative training sessions in real time with geographically dispersed instructors and learners, complete with multimedia presentations, software simulations, application sharing, and participant polling. Classroom sessions can be easily recorded for later on-demand viewing and shared through an instructor's dedicated, personal meeting room that can be accessed instantly at any time by anyone using Adobe Flash Player, giving learners the opportunity to review content after the live event is over. And in the case of recurring classes, trainers can considerably reduce preparation time using customizable layouts, which they can save for future sessions, complete with all required content. Because the system supports permissions-based access to course content and meeting room layouts, multiple presenters can share meeting room templates as well as course content and assets, using a fully searchable, centralized content library, which makes it easy to find, retrieve, reuse, and update existing training content.

Customize and manage all facets of online training

A cost-effective training solution enables professional trainers to manage virtually all aspects of employee, partner, and customer training. With the Adobe eLearning solution, trainers can schedule courses, enroll learners, grant viewing permissions, automate enrollment notices and reminders, and track learner statistics. Trainers can also develop curriculums that drive results by combining live classes, multiple self-paced training courses, and other training content. In addition, they can easily define course prerequisites, specify optional and required modules, and establish progressive learning paths for self-paced training, live instructor-led training, and external events such as manager assessments. And, they can customize the look and feel of self-paced courses and virtual classrooms using company logos and colors, in accordance with the company brand guidelines.

Leverage your existing infrastructure

The Adobe eLearning solution for rapid training integrates smoothly with common corporate user management and learning management systems. It supports Active Directory and LDAP for user authentication, and all rapid training content produced with this solution is SCORM 1.2, SCORM 2004, and AICC compliant, making it easy for trainers and administrators to deliver and track courses through their existing corporate learning management systems.

Produce measurable results with an affordable end-to-end training solution

The Adobe eLearning solution for rapid training is a cost-effective end-to-end training solution that can help you solve your most challenging training issues. It enables training professionals with PowerPoint skills to develop progressive training curriculums and create and deploy standards-compliant, rich training modules that will engage minds and get your employees, partners, and customers on message and up to speed in no time.

Better by Adobe™

Keeping the e-Learning Strategy Focused

By Kevin Moore

Organizations are in a battle to meet ever-changing market needs, client and customer demands, and internal and external pressures. This requires a clear, concise, and documented strategy for improvement of employee performance. Managing and improving the performance of employees and supporting staff is a journey rather than a destination, and, as such, requires careful thought, allocation of resources, and executive support.

Performance improvement should be a part of the organizational goals. The learning strategy document should describe the system for learning and performance across the organization (Moore 2006). This change toward the acquisition and management of learning and performance using sophisticated technology presents a tremendous challenge in today's business, education, and government environments. It represents a necessary paradigm shift to adequately prepare our people for their future in the work environment, while preserving and leveraging the past through knowledge management.

Simply put, while we have the ability to move information and data faster, we won't achieve true success until we can accurately target and disseminate information to the correct audience, at the right time, and in the right amount and format for performance improvement (Moore, 2007).

The learning and performance system is about the flow of knowledge and information within and between organizations, business units, and individuals (Parkin, 2006). The learning strategy document should deal specifically with the management of this system, and it should raise the organizational, departmental, and individual concerns on efficiency and effectiveness of people and processes.

A learning and performance system operates at a higher level, involving culture, beliefs, and values. Although this system will have a financial impact, it represents a higher level of understanding of the knowledge processes that lead to performance improvement at the job level. Fundamentally this learning and performance system is about making better decisions at every level of the organization, and increasing the organizational intelligence to proactively meet market demands.

Critical to the success of this system, of which the e-Learning strategy is one component, are solid links to business process, organizational culture, and continuous meaningful measurement. The learning and performance system is depicted in Figure 1-1 on page 2 … this describes our world!

Contents

In Chapter 1 you will find information about:
- **Learning strategy**
- **Process for developing the e-Learning strategy**
- **Doomed to failure**
- **Keeping focused on the strategy**

Learning strategy

A learning strategy describes the input, output, and measures of the system, and should have organizational, departmental, business unit, and individual references. This should be a far-reaching document that details how the organization is going to facilitate continuous improvement in its employees. It implies a focus on the development of a learning culture.

To achieve this goal, you must increase the utility of knowledge through three key components:

1. Capture and creation of data, information, and knowledge assets in support of each individual's performance functions across the organization. Provide links to knowledge management and document management practices.
2. Intelligent storage, leveraging useful taxonomies, and search and retrieve capability that better manages and improves access to content.
3. Dissemination and access practices, including but not limited to: e-Learning, instructor-led training, documentation, mentoring and coaching, and outside sources.

Historically the three components listed above have been critical in research and practice. However, many organizations have yet to fully realize the movement and integration of knowledge within themselves. A complete system for managing information has been out of reach for many organizations, due in large part to the lack of a comprehensive strategy. The measures of any system for knowledge and learning should in-clude the accuracy, specificity, and timely delivery of the knowledge the user receives, and how effective that knowledge is in changing behaviors and improving performance. In addition, a key measure for success should be based on how knowledge feeds back into the system to make it a continuous, accurate, and valuable resource that meets users' needs.

Figure 1-1
The learning and perform-ance system

Business process

The e-Learning strategy lives through the learning strategy, which, in turn, is deeply embedded in the organizational strategy. This is true for all departments within the organization. In addition, the learning strategy must link clearly to the mission and vision of the organization. The value driven by learning and performance must be reflected across the organization in the ways people, customers, clients, vendors, and the job environment are perceived.

Ultimately, the process of developing a well-thought-out and successful learning strategy will include a focused e-Learning strategy that will provide details around the following:

• Defining the initiative and vision around the strategy.
• Defining the needs and expectations of executive leadership.
• Defining the needs and wants of the users at the organizational, departmental, business group, and individual levels.
• Defining the technology to support the system.

The strategy will also include a process to ensure alignment of each offering to overall organizational goals and objectives. We highly recommend that the learning strategy address:

- Aligning learning strategy goals with organizational and departmental goals.
- Ensuring the support of executive leadership and acceptance of the strategy by contributors and users.
- Determining baseline technology requirements and capacity to support the learning and e-Learning strategy.
- Partnering with the internal training professionals in creating a plan for roll-out and implementation.
- Devising a methodology to evaluate and measure results.

People

In developing a learning strategy, a critical aspect is how engaged the people are, and how they will play a role as the strategy builders and as the recipients of the strategy successes. People simply are the driving force behind every part of the strategy. Basically, as learning and performance professionals, we state that the development of programs, courses, lessons, and knowledge objects is for the overt use of an individual who has a specific need to learn, refresh, or teach while engaged in a performance-measured task or function. This individual is our end user. A focus on the principles "Simple is better and less is more" is one over-arching objective when developing a learning or an e-Learning strategy. When faced with the building of a strategy, selection of key people from across the organization will be the most important decision to ensure success. For this reason a teaming approach seems to be best when developing a learning strategy.

Why involve people from Accounting, Operations, or even Sales for that matter? It's simple, really … they are the people who will bring focused attention and a level of importance to the rest of the organization. This is an organization-wide strategy, and, as such, needs to have key people across the organization and within the executive level involved. Executive level sponsorship, ownership, and understanding are the single greatest assets for successful development and implementation of a learning strategy, as well as an e-Learning strategy. It is how you allocate resources, and it will enable access across the organization.

In the past it has always been apparent that development and implementation of a learning strategy is established largely through a push from the top down, rather than from a user-focused, bottom-up approach. The reason for the top-down push has been for cost reduction, human capital realignment within the organization, large technology purchases, or to capture knowledge and information before it leaves the organization. Any learning and performance systems approach will begin to show significant return on value when the process is user-focused.

The job roles and functions of individuals and groups within the organization drive this approach. Learning and performance content developed from the users will have a significant impact on how work, and workers, are perceived and valued in the decisions they make and their role in the organization. This focus is directly associated with involving people from across the organization in developing the learning strategy.

E-Learning strategy

Development of the learning strategy will enable the organization to determine the needs across the enterprise for capture and creation, intelligent storage and dissemination of information, and the role of technology. Many organizations simply cannot justify the need to put content online as it will serve little or no value in getting the work done. For the same reason, putting content online that has little or no value is also a significant waste of time and effort.

You must demonstrate a justifiable need that links the initiative to performance improvement. The

inability to demonstrate this need has been the bane of e-Learning since its inception. It is easy to see when organizations do not have solid learning strategies. It is evident in disconnected, disorganized, and hard-to-access content, and is basically a vast waste of time, money, and effort. You drive a value-based approach to e-Learning by a clear, concise, and measurable strategy for the organization, and you must follow and evaluate this strategy.

Any e-Learning strategy must include methods for designing and deploying learning solutions, change management, communication planning, performance support solutions, and knowledge management services and technologies. (See Figure 1-2.)

This document must allow the organization to plan, design, develop, and deliver solutions that ensure that people have the necessary knowledge to embrace change and perform at a level required for business success. This will require:

- **Training expertise.** Understanding of adult learning practices and principles as the theoretical underpinnings of organizational learning initiatives; methods that focus on outcomes in an efficient, effective, and cost-effective manner; learning content management practices; and instructional design and development methodologies.
- **Training and development experience.** An understanding of the field of learning and instructional technologies and an awareness of the importance that training plays in an organization's ability to maintain a competitive edge in a quickly changing global environment.
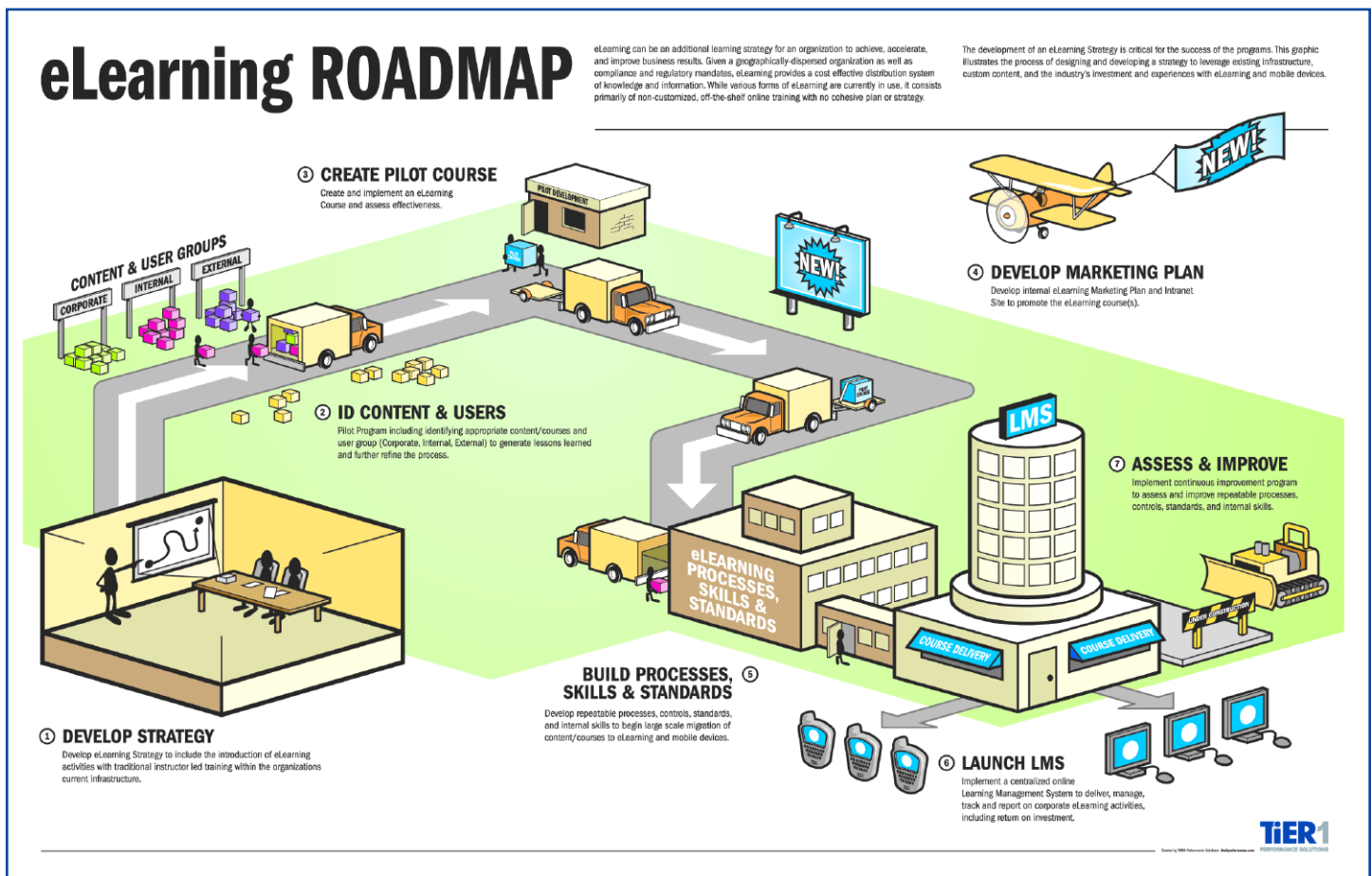- **Rigorous project management process**. Understanding and adherence to proven project man-

Figure 1-2 *E-Learning strategy.*

agement techniques to ensure all projects are completed on-time, within budget, and to the satisfaction of our clients (internal and external).

- **Available and emerging learning technologies.** Familiarity and understanding of learning management system (LMS) and learning content management system (LCMS) technologies from both a theoretical and a practical standpoint.
- **Business process.** A keen awareness and understanding of how the business works, and how the learning and performance group plays a role in that endeavor. This is a return on value understanding.

The development of an e-Learning strategy as a component to the learning strategy is a critical success point, and you should not take it lightly. However, this is not a long drawn-out process. You should recognize that development of a strategy is a point-in-time effort, that changes in the operational environment will occur, and that you must account for them and then recalibrate the strategy.

Process for developing the e-Learning strategy

The process for developing an e-Learning strategy is exactly the same as the process for developing a learning strategy. However, a focus on dissemination of content via technology usually emerges. Whereas the process for developing an e-Learning strategy can be comprehensive, it is far easier to digest if broken into component parts.

The areas of focus listed below are not necessarily in order, and you can complete them as the opportunity comes available. However, it is important that you indeed explore each area, and a series of measures from each area will allow you to stay focused as you implement the strategy. These areas will also determine who in the organization needs to be part of the team that develops the strategy. For example, the IT person should be represented and have a key stake when exploring technology in Area 6.

Area 1: Learning across the organization

Analysis in this area involves documenting what you currently know about the existing situation and the anticipated direction, both internally and externally, for learning programs. This would identify key decision points and factors that impact strategies, software, tools, processes, resources required, learning, performance, business objectives, existing content, and channels. It would include documenting all assumptions you are making, and how those assumptions impact the overall solution. It would also identify a timeline and schedule for how and when to re-visit various issues as decisions are made. Finally, it would validate current tool sets, processes, and procedures, and identify areas of risk.

Area 2: Content selection process

This area involves a high-level analysis of the current process used to select content for courses, presentations, programs, et al., assuming there is one. The overall goal is to detail a process that will enable selection of appropriate content to put in an e-Learning format to meet the business and learning objectives. The content selection process determines how to decide which content, desired topics and subjects, and existing courses and content need to be developed, and in what manner.

Having a blended learning approach is critical as you identify various delivery styles (e.g., Web-based basic, Web-based highly interactive, instructor-led, etc.) and decision criteria for determining the right style and delivery medium for the particular course and content you will develop. The decision criteria will take into consideration such things as timeliness (when it needs to be prepared), target audience, content type, audience needs, possibilities for modularity to meet the needs of other

audiences, and criticality of the subject. Other factors include: corporate content, where the content resides, what the format is and how it is structured, which content is of high or low value, and the stability of the content in terms of how often you need to edit or update it.

Area 3: Access, retrieval, and reuse

This area explores a high-level taxonomy to categorize and classify content within context to the learning, performance, and business objectives. In this area we are exploring how to identify and tag content in meaningful ways so the end-user can gain access at the right level. This is critical for reuse and for making informed, intelligent decisions about future content, maintenance concerns, and technology needs.

Area 4: Mapping and content reuse

The mapping process explores how to map content to the learning, performance, and business objectives by leveraging data and information from other systems such as user profiles, learner paths, new hire orientation, succession planning, and development. Mapping content in this way is very powerful for existing and future content, but it is an often overlooked method as it is time-consuming. Content re-use and the creation process evaluates selected content based on end-user attributes, end-user playback environments, and learning, performance, and business objectives. There are dozens of factors to consider when reusing content. Developing an
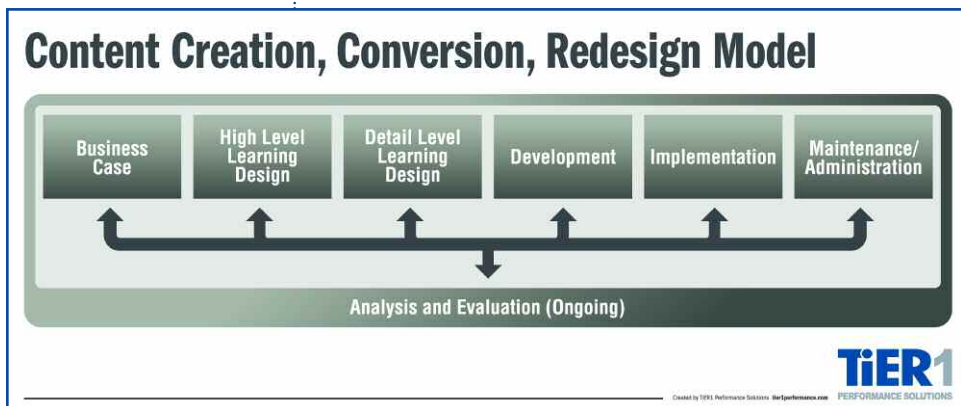
Figure 1-3
Development methodology

efficient methodology that provides a framework, a standardized process, and tools and templates for how to effectively and efficiently move courses and content to the Web is crucial.

Area 5: Development methodology

The analysis, design, development, implementation, evaluation (ADDIE) model has clear reference points to the learning and performance system, and still applies. However, with an e-Learning strategy, success is dependent on output and how we manage that output. Using an iterative model that has continuous evaluation and business-case analysis will be critical. (See Figure 1-3.) People often overlook overtly adopting a development methodology, or they just assume one is understood within an organization. The e-Learning Strategy should detail what model, how we interact with the model, and how we evaluate the output from the model.

Area 6: Technology

This is not the place to start! Area 6 involves a high-level plan to address Web-portal design, LMS and LCMS features, functionality, technical requirements, and to flush out business needs and potential costing models. This process will document known technical and functional requirements, and evaluate existing software applications for how well they address those requirements. In areas where gaps are too substantial, you should evaluate alternative products.

Potential areas of software you might evaluate include authoring platforms for Web development, competency profiling and/or assessment systems, LMSs and LCMSs, knowledge management sys-

tems, class registration systems, and assessment authoring and delivery systems. The specific categories of products to evaluate will be determined based on the requirements established in prior steps.

Area 7: Maintenance planning

Area 7 details how you will maintain the content, authoring, LMS, LCMS, and other systems. Over time this will represent the largest amount of time, money, and effort. Often, directors of organizational learning understand too late in the game that neglecting this important area can sabotage their entire learning effort and cost them their jobs. A plan must be established to identify a systematic review, revise, and release cycle, define triggering mechanisms and measurement criteria, and evaluate the shelf-life of learning content to provide fresh, timely, and engaging learning experiences.

Area 8: E-Learning strategy plan

After you have laid out the entire strategy, or set of strategies, you need to develop projects, tasks, activities, dependencies, resources, and timelines for moving forward. The e-Learning strategy plan includes a process for prioritizing projects, managing scope, identifying and resolving issues, and shifting schedules and resources as the programs and projects move forward.

Area 9: Measurement and evaluation

This area explores how you will measure the successes and failures of training programs within the organization. Do not stray from this focus, and be responsible for reporting successes and failures both up and down the chain of command. Traditional methods for evaluating the effectiveness of learning programs within companies have presented a myriad of problems. Most notably, there is a lack of metrics in place to gauge the worth of the instructional process. What value for the organization has resulted from the money, time, and effort we've put forth? This question is intense and well-justified. Any learning strategy and e-Learning strategy should have the basis for the answer. There's merit in measuring whether or not the technology is up and running, how many people passed through a course, or if the participants liked the course, but as you move up the chain of command the haunting question of "What did I get" remains.

Outcomes must be established to assess the whole technology-enabled instructional process, and the outcomes are highly dependent on the technology architecture, content, instructional design, teaching strategies associated with software, attitude of all those who participate, and the work environment. Coupled with the hard metrics most commonly associated with technology (hardware, software, and maintenance costs) you will need to establish a true assessment of the learning programs.

Doomed to failure

Will you be doomed to failure and fall into the e-Learning abyss if you don't take the time to create a strategy for the organization? At some level, I would say, "Yes, absolutely!" Does it have to be a "formal" strategy as I suggest in this chapter? Probably not. However, if you are "feeling" your way through this and "flying by the seat of your pants," then pay close attention to some of the key areas where you might look to avoid:

• Failure to establish some plan that you can measure: It is hard to take credit for events that happen with or without influence from the learning organization. Lance Dublin wrote that, "The road taken is often the one that was better sold, the cheapest, or the easiest to agree on — rather than the best choice for your organization. Such decisions fail to reflect a strategy of any kind. They are happenstance."

- Failure to recognize the importance, interdependence, and connections of people, process, and technology within the organization to attain learning goals.
- Failure to recognize that, above all, what matters are the people affected by the programs and systems put in place for learning. Very rarely does a person turn to an LMS when he or she needs to solve a problem quickly.
- Failure to consider learning across the organization (the think big — act small syndrome).
- Failure to recognize the importance of learner motivation, attitude, and ownership over content and processes.
- Failure to recognize organizational values, culture, and the mission.
- Failure to measure progress.
- Fail to START and STAY FOCUSED on the strategy.

As previously stated, the process of developing and tracking an e-Learning strategy is relatively straightforward. The success of that strategy, however, will depend on a well-thought-out approach and support from key individuals within your organization. The learning strategy and the e-Learning strategy documents should be navigational maps that you adapt and improve along your journey.

Take the time to invest in the development of the strategies, even if you don't have adequate resources to do so. I've never seen a learning group within an organization receive a budget, people, and time to do their work twice! A powerful, valuable, and highly accurate strategy from the beginning is a magic bullet!

Keeping focused on the strategy

There are several processes for developing a learning strategy and an e-Learning strategy, but how do you stay focused? To stay focused on the plan follow these three key, never fail, techniques:

- First, use the learning and e-Learning strategy like a business plan and establish a board of directors from across the organization to help guide you along the way. Choose people to be on this board who will add value, and who will push you and your organization to succeed. The board should meet quarterly.
- Secondly, measure, measure, measure, and report on progress on a quarterly basis. Make this report with the data (both good and bad) part of the corporate reporting structure.
- Lastly, make the strategy document visible to the team members, the departments, and the organization. Create a communication plan, and get the word out that you have a strategy and intend to implement this strategy. Always remember that a mediocre plan of action today is better than a perfect plan tomorrow.

References

Dublin, L. (2004). *Lessons on e-Learning Strategy Development from the Cheshire Cat.* ASTD Learning Circuits. http://www.learningcircuits.org/2004/sep2004/dublin.htm

Moore, K. C. (2006). Learning Across the Organization: System Based Learning. METS Learning Center, Conference, May 2006. http://www.tier1performance.com/Articles/learningacross.pdf

Moore, K.C., Kincaid, E.W., Shaw, M.A., Hoffer, D.B. (2007) Critical Use of Images in Knowledge-Based Dissemination and Learning Systems. Image Conference Proceedings, July 2007, Scottsdale, AZ. http://www.tier1performance.com/Articles/image.pdf

Parkin, G. (2006) In an open letter in response to the e-Learning Hype Cycle. http://www.e-learningguru.com/articles/ezine1_2c.htm

ADOBE® CAPTIVATE® 3 AND ADOBE® CONTRIBUTE® CS3

CREATE HIGH-IMPACT INFORMAL LEARNING CONTENT
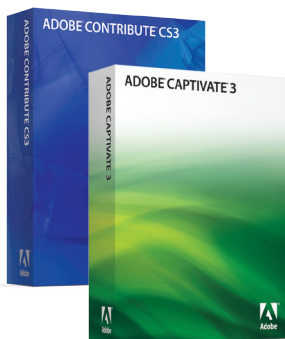
With Adobe Captivate 3 and Adobe Contribute CS3 software, anyone can rapidly develop screencasts, podcasts, blogs, and websites.
In today's increasingly competitive business environment, organizations must find new and innovative ways to keep employees' skills fresh and productivity high. To do this, corporate trainers, educators, and business

users are turning to informal learning methods, such as screencasts, podcasts, and blogs. Using Adobe Captivate 3 and Contribute CS3, anyone can rapidly develop and deploy high-impact informal learning content that increases employee performance and enhances skills—without learning how to program in Adobe Flash® or HTML.

Use Adobe Captivate 3 and Adobe Contribute CS3 for:

• Screencasts: Create interactive simulations and software demonstrations in Adobe Captivate 3, and drag and drop the screencast into a blog or web page using Contribute CS3.

• Podcasts: Export MP3 audio files from Adobe Captivate 3 and link them to a website or blog using Contribute CS3.

• Blogs: Add rich content and take advantage of formatting options for blogs with Contribute CS3.

• Publishing: Edit HTML pages containing Adobe Captivate 3 content using Contribute CS3.
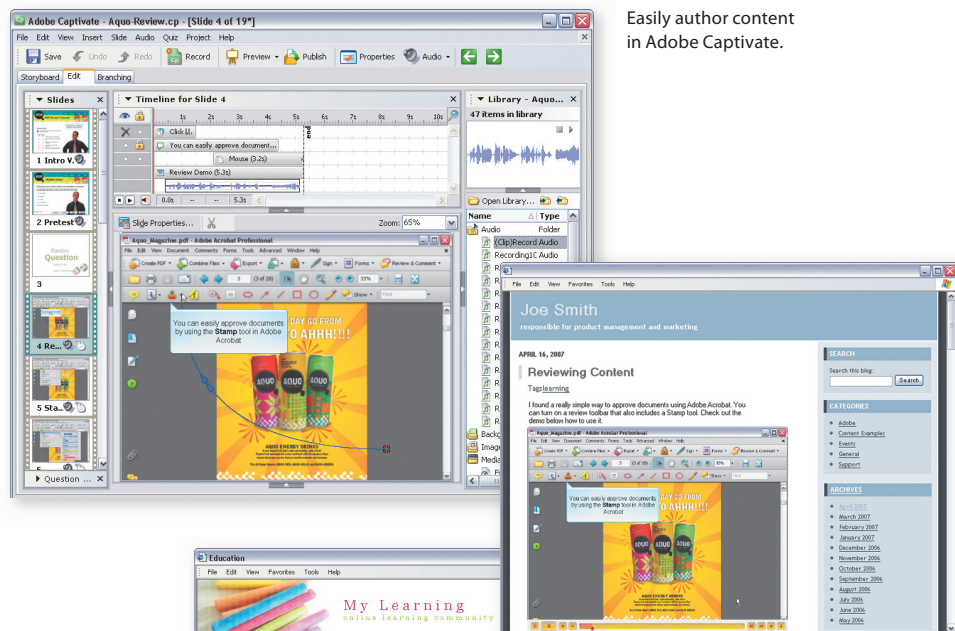
Easily author content in Adobe Captivate.

Use Adobe Captivate content in a blog.

Integrate Adobe Captivate content in a web page.

Adobe Captivate 3
System requirements
Windows®

- Intel® Pentium® 4, Intel Centrino®, Intel Xeon®, or Intel Core™ Duo (or compatible) processor
- Microsoft® Windows XP with Service Pack 2, Windows 2000 with Service Pack 2, or Windows Vista™ Home Premium, Business, Ultimate, or Enterprise (certified for 32-bit editions)
- 512MB of RAM (1GB recommended)
- 700MB of available hard-disk space (additional free space required during installation)
- DVD-ROM drive
- 800x600 screen resolution (1,024x768 recommended)
- Internet or phone connection required for product activation

Adobe Contribute CS3
System requirements
Windows

- Intel Pentium 4, Intel Centrino, Intel Xeon, or Intel Core Duo (or compatible) processor
- Microsoft Windows XP with Service Pack 2 or Windows Vista Home Premium, Business, Ultimate, or Enterprise (certified for 32-bit editions)
- 512MB of RAM
- 1GB of available hard-disk space
- 1,024x768 monitor resolution with 16-bit video card
- DVD-ROM drive
- Internet or phone connection required for product activation
- For the Contribute web browser plug-in: Internet Explorer 6 or 7 or Firefox 2
- For the Microsoft Office plug-in: Office 2003, 2006, or 2007

Macintosh

- PowerPC® G4 or G5 or multicore Intel processor
- Mac OS X v.10.4.8
- 512MB of RAM
- 1.4GB of available hard-disk space
- 1,024x768 monitor resolution with 16-bit video card
- DVD-ROM drive
- Internet or phone connection required for product activation
- For the Contribute web browser plug-in: Firefox 2
  Note: You do not need Adobe Dreamweaver® CS3 software when using Contribute CS3.

For more information

For more information about Adobe Captivate 3, visit *www.adobe.com/products/captivate*.

For more information about Adobe Contribute CS3, visit, *www.adobe.com/products/contribute*.

Adobe Captivate and Adobe Contribute workflow

Adobe Captivate → **Adobe Contribute**
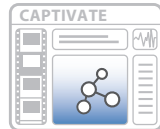
Create | Edit

Record screen actions and create a Flash Player compatible SWF file that contains the demonstration or interactive simulation.

Publish the SWF file from Adobe Captivate. The SWF and HTML files are generated.
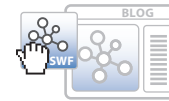
Insert or drag and drop the SWF file into your web page or blog. The SWF file automatically starts playing within the WYSIWYG editor.
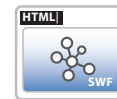
Use Contribute to modify the HTML file generated by Adobe Captivate, and add a title, description, or other content around the SWF file.

Use Adobe Captivate 3 to create screencasts and podcasts

With Adobe Captivate 3, learning professionals, educators, and business or enterprise users can rapidly create interactive simulations, software demonstrations, and scenario-based training complete with quizzing and scoring without programming or multimedia skills. Then, using Contribute CS3, they can post and publish this learning content as screencasts or podcasts onto websites and blogs.

Use Adobe Captivate 3 to create a new product demonstration by capturing onscreen actions, and drag and drop the resulting SWF file into a blog using Contribute CS3. Or record an audio file in Adobe Captivate 3, export it in MP3 format, and link the MP3 file to a website or blog using Contribute CS3—without any HTML knowledge.

Use Adobe Contribute CS3 to edit and update blogs and web pages

Contribute CS3 enables you to easily add content to and update websites and blogs. As blogs become more prevalent, Contribute CS3 enables organizations to take advantage of this alternative form of eLearning.

With Contribute CS3, you can simply drag and drop your Adobe Captivate SWF file onto a web page or blog entry. True WYSIWYG authoring capabilities let you see exactly how your content will look prior to publishing. When you're ready, Contribute CS3 automatically creates the HTML code and loads the Adobe Captivate SWF file. With Adobe Captivate 3 and Contribute CS3, anyone can create media-rich, just-in-time training—with a few, simple mouse clicks.

	Adobe Captivate 3	Adobe Contribute CS3
Screencasting	•	
Podcasting[*]	•	
Interactive simulations	•	
Blogging		•
Web page editing		•

[*] Export audio files in MP3 format

Strategies for Transition to e-Learning

By Frank Hanfland

Companies are eager to implant e-Learning and learning management systems into their organizations, and for good reason. The last 20 years have seen significant changes in how learning in the workplace occurs. There has been a greater focus on informal learning, such as instant collaboration, Intranets, Internet searches, task meetings, and knowledge bases. People expect only a minority of training to be so strategic that it requires a formal instructor-led approach, and even in these cases the benefits of e-Learning-based content have been without question.

Changes in workplace dynamics also dictate changes in how we train our workforce. Mobile workforces, globalization of companies, and faster product evolution challenge training organizations with concepts such as just-in-time training, localization, and mobile learning.

The increasing cost of instructor-led training stemming, not only from the increasing cost of travel but also from the increasing cost of being unproductive while attending a class, makes e-Learning an attractive proposition.

Finally, the influence of technology into every profession allows us to support and train our employees better than ever before. Take for example an elevator repair technician – known for blue coveralls and a toolbox. Today, the same technician accesses the company's intranet using a PDA to reference a repair manual in order to complete the job.

But you should realize that installing a learning management system (LMS) or buying an e-Learning course from a vendor, and implementing a strategic e-Learning solution that transforms a company's culture into a performance support culture are two completely different things.

Before we even begin to discuss how to successfully implement an e-Learning solution, we need to establish a baseline to measure against. The first task before writing any project plan is to collect data. If there is an existing e-Learning offering, document quantitative data such as how much the system is costing you, and measure the return on investment. Collect any qualitative shortcomings, such as system performance issues.

Organizations that do not have an e-Learning offering should document how much travel is costing, how many hours employees are not productive because of training attendance, and any time lags between training requirement and actual training occurrence.

Contents

In Chapter 2 you will find information about:

E-Learning deployment overview

Once you have established a baseline, it is time to discuss how to deploy an e-Learning solution. E-Learning deployments can be challenging because of the many different aspects you must consider. (See Figure 2-1.) Failing to properly manage such a strategic change can be costly, at best delaying acceptance and positive returns on investment, and at worst having a failed implementation whose performance does not align with the organization's needs. Because of these different aspects I have divided deployment into five phases, and each phase will be broken into four managed areas. In the following sections we will take a closer look at each phase, and each area within each phase.

Figure 2-1 helps to break down the complexities of a successful e-Learning deployment into manageable pieces. Nevertheless, a successful implementation can take several months, and up to several years, depending on the factors you assess in the first phase.
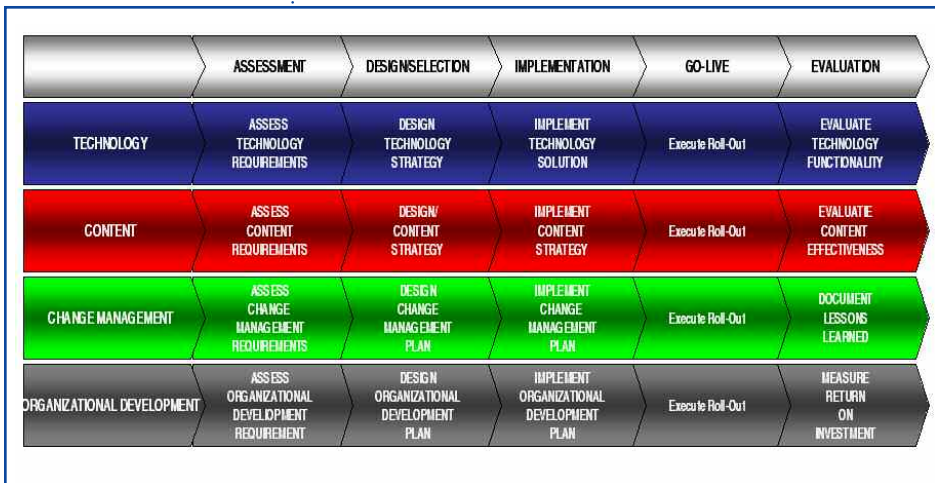
Figure 2-1
Transition phases

Timing

The following sections describe the deployment methods in more detail, but don't answer one question: When to start. One of the proven ways to find the right time is to align with major organizational events that pose tremendous challenges on a training organizations, such as a company-wide industry-standard certification, or a major ERP implementation. After all — it's hard to find a sponsor if it's business as usual. These challenges are large enough to warrant e-Learning deployment and a change to the way you deliver training. These types of projects — while not strictly training projects by themselves — are also so large from a budgetary standpoint that organization-wide e-Learning deployment can be included in those budgets. Sooner or later there will have to be training delivery — so e-Learning deployment might as well be a part of them.

Assessment

The first phase, and one of the most important ones, is to assess the needs of the organization. We'll have a closer look at what needs you might assess for each area. This phase is an important milestone, because the results will provide answers to some basic, but heavy-weighing questions, such as how long the project will take, how many resources might be needed, how much budget might be needed, and what success might look like.

Assess technology requirements

In order to arrive at a solution that works at optimum levels for your organization, technology requirements focus on the LMS you will need in order to launch personalized content and track participation.

This logical separation is possible because most providers of LMSs comply with either the AICC or SCORM standard, which outlines how content interacts with the system. The exceptions are learning content management systems (LCMS), which in many cases combine learning management with content creation and delivery, and require a combined technology strategy.

I will not cover every aspect of technology implementation, or LMS selection, as there are detailed buying guides available — rather I will provide key pointers for a successful technology assessment.

Legacy systems

A first look should be given to any available legacy systems that have served your organization, because they can provide a wealth of information, such as who uses the system, how many users there are, how it is configured, how well it works, and what improvement opportunities exist.

Data interfaces

Data interfaces play an ever-increasing role in today's human resource and performance management strategies. These systems not only collect data, but often times need to "talk" to each other. Data interfaces might exist (or might be needed) between human resources information systems (HRISs), ensuring that employee data in both systems match, or talent management systems (TMSs) might need to know the exact qualifications a person has obtained through training, and the LMS needs to know what qualifications a person might need to fulfill their job. These bring up a potential interface need between the LMS and an organizational management system (OMS). Large companies often employ enterprise resource planning (ERP) software, which may combine all these different information systems into one, making interfacing somewhat easier. The key point is that you'll need to assess what information your system needs to function as expected.

Hosted or installed

Another question might be whether to purchase a perpetual license for your system and have it installed at your site or to deploy a hosted version. A hosted version usually runs at the vendor's data center, and is also known as a Software as Service (SAS) or Application Service Provider (ASP) model. Either deployment may make sense for your organization. The choice of which model to deploy depends on budget, available in-house support, and the level of customization and data security that may be required.

Must-have features

Must-have features are clearly defined: If the system does not have it, it must either be customized to provide that feature, or this system cannot be a contender. Such features might include support for standards-compliant content, accessibility (Section 508 compliance), various features of day-to-day administrative tasks, or legacy content compatibility.

The way to assess what features are needed and how these features are supposed to work is through interviews with stakeholders, administrators, and end users. High-level stakeholders might provide insight into which data they need and what reporting might have to look like, and in the end they have to approve the budget. However, end users have to use the system on a daily basis, so their input is of extreme importance. If the system does not function as expected at that level, end users won't want to work with it, posing a threat to the organizational change requirement that drove the e-Learning implementation. Don't forget to look into international locations if your organization has them, as their needs may vary greatly from your domestic system needs. For example, if your company needs to deploy content in Southeast Asia, the system must be able to support those languages.

Desired features

Implementing a new system entirely from scratch provides an opportunity to reach for the sky.

If properly planned, you can implement many features that are "nice-to-have" such as mobile content for example. Again, the best way to find out is to ask key stakeholders and end users at various levels throughout the organization.

Assess content requirements

Content requirements vary greatly whether the e-Learning deployment is a first effort in this direction, or if there are existing systems that house content. In many cases content creation, conversion, and purchasing of new content continue while implementing the new system, because for e-Learning to be effective, there must be content. Even with modern rapid development methodologies, creating content costs time and money. In the end, whether to handle content creation and conversion in-house or to outsource these efforts depends on available resources and budget.

Instructional design requirements

You need to assess instructional design requirements to ensure that content creation strategy supports the required training results. A strategy to convert static slides into e-Learning might be sufficient to teach the outline points, but lack of interaction and learner engagement pose challenges in regards to content retention. This is a good time to look closely at the organization's instructional design strategy and ensure that content can support it.

Content creation

Key questions to ask are about the features newly created content must support. Will there be audio, video, streaming content, and live collaboration? How much content must you produce? Is the content that you will create during the deployment compatible with all systems?

Content conversion

Is the existing content (if any) standards-compliant, or will it need to be converted? If it needs to be converted, how much effort is involved?

Off-the-shelf content

Off-the-shelf content can be a viable solution to a company's need to rapidly create content or eliminate the need to convert content. Most commercially available content is standards-compliant and provides the advantage of being cost-effective and rapidly deployed compared to custom courseware.

Must-have features

Whether developed in-house, outsourced, or purchased, these features are critical to your organization's needs, and might include glossaries, audio narration, videos, live text chats, or a wealth of other features that may be available in modern e-Learning content. Too many features might be distracting from the actual content, so finding the right balance is important. Key stakeholders, administrators, and end users will be able to provide answers as to which features are critical to fill the organization's needs. Be certain to include a look into the foreseeable future to ensure that the content strategy will support next-generation content.

Nice-to-have features

Similar to the technology requirements assessment, now is the time to add any "bells and whistles"

to the content, if the organization's needs warrant them. Such features might include customizable content based on learner experience and proficiency. Be aware that you must also support any feature.

Assess change management requirements

Change management is often the most neglected part in many deployments; nevertheless it plays an important role in your deployment. Deploying a new e-Learning strategy is a change, and people are naturally afraid of the unknown.

Communication strategy

Questions to ask include, "Who will be responsible for communication?" Sometimes the answer is easy: You are! Some larger organizations have an entire change management office, which will handle communication for this project. Other factors include the size of the user base, ranging from a single administrator to potentially thousands of users. You should pay particular attention to the perception of technology deployments. Do users trust the company with the deployment of a key strategy? Or, is the perception such that users feel another short-term failure arising?

Training strategy

The assessment should focus on what processes will change, and so will require training, as well as identify who the changes will affect. You need to pay close attention to available resources to develop and deliver the training.

Assess organizational development

The organizational development assessment not only establishes a current state of the organization from a business process and organizational structure point of view, but also needs to identify any opportunities that need addressing through e-Learning and LMS deployments.

Business processes

Each and every business process affected by this project needs to be documented and validated. Many organizations have documented business processes and procedures; but many do not have such vital documentation. This is the time to identify whether or not current processes serve the organization's need, or if the process is broken. It simply does not make any sense to implement a process that does not align with the reality of business. The result of the assessment should be a clear vision of which documentation exists, which you will have to create, and how you will create it.

Support requirements

Any new deployment will require support. Your organization must be prepared to handle support calls from the first minute the system goes live, and should expect a higher incident volume during the initial few weeks after go-live.

The assessment needs to identify how you will handle support and what the support structure looks like. Is there a dedicated support group in your organization? Can this support group handle e-Learning support, and if yes, how will you train them? Does the vendor provide support, and if yes, who is the key contact? Will the support organization be tiered, and if yes, who has access to what tier level?

Organizational structure

What information is available about the organization layout, and is the information correct? Is the organizational structure granular enough to assign training to the position level? Is it grouped into families that allow setting rules for entire groups of similar requirements?

Talent management

Is there a talent management process or system? What process does succession planning follow? Are these processes integrated? At a minimum, the assessment needs to outline the qualifications to track, and what e-Learning offerings fulfill these qualifications.

Personnel changes

Determine any reduction, addition, or transformation in personnel that might be required. For example the organization might need fewer instructors after the successful deployment, but will require more performance support coaches. You need to assess these types of transitions so you can properly manage them.

Summary of the assessment phase

The assessment phase breaks the needs of the organization that must be addressed into manageable pieces. To use a paradigm, the assessment phase results in the list of ingredients that are required for each of the courses in this five-course menu. The next phase, "Design and Selection" establishes the recipe for our meal.

Design and selection

With the data collected through the assessment phase, the team can begin to design how to fulfill these needs and select products and vendors to provide some of these services. We will spend less time on this section, since the varying methodologies for each potential element, and their associated benefits and drawbacks, are beyond the scope of this book.

Design the technology strategy

This element deals with the selection of an LMS or LCMS that will provide your organization's e-Learning content, track participation, evaluate learning paths, and so on. What exactly this system needs to do depends directly on the technology assessment completed during the first phase.

Select vendor or design in-house development plan

There are over 1,500 commercially available LMSs at varying price points, featuring an even wider list of features. Which system is best for your organization will most likely represent a compromise between how well features fit your needs and budget available for customizations. Other organizations might choose to develop the system in-house. The advantage is that the system is custom-tailored to the organization's needs, however it may take much longer to implement. As mentioned earlier, there are detailed buying guides that will allow your organization to make the best choice for its individual needs.

Design data interfaces and customizations

In this section the team designs the identified data interfaces. This includes interface methodology, such as batch file loading or live data transmission, data elements to be exchanged, data format, direction of travel from system to system, and frequency of exchange. In addition, any customiza-

tions that will have to be made to a vendor-supplied system should be designed at this time.

Design user interfaces and portals

Depending on your organizational structure and the needs identified in the assessment, you should design and acceptance-test any user interface before fully developing it. In addition, your organization might require the design of several separate portals to provide the look, feel, and functionality the portal owner requires.

Design content strategy

This element deals with the methodology and processes the organization will use to populate the e-Learning solution with content that aligns with the organization's requirements.

Design course catalog and qualification catalog

The first step should be to design the course catalog, based on the facts learned during the assessment. The design is dependent on many factors, for example, which courses exist, which need to be developed, and how courses are classified. At this point some of the separately-managed areas begin to flow together. Because you established the qualification catalog's needs during the organizational change assessment, the design focuses on how the course catalog fulfills the qualification requirements.

Design content development methodology

Based on the assessment, select the methodology used to develop content. For example, you might choose rapid content development for informal training, online collaboration for meetings, and traditional development for strategic courses. You will establish content development processes, roles, and responsibilities and create the design methodology guidelines.

Design performance support methodology

Design the required performance support based on the organization's needs, such as knowledge bases, intranets, job aids, and coaching programs, just to name a few.

Software and vendor selection

Based on the identified content development methodology and the assessed content needs, you can select the appropriate software. Sometimes this step closely aligns with the content development methodology, because software can dictate which capabilities are available. Quite often it is the software that pushes the envelope of what was thought to be impossible. At this time it is also appropriate to select any vendors that might be required.

Design change management plan

The change management plan provides the roadmap to fulfill the change management needs identified during the first phase. The change management plan should, at a minimum, address the basic change management phases (preparing for change, managing change, reinforcing change), and should include assessments to evaluate how well the change management plan addresses the company's needs.

Communication plan

The communication plan should not only focus on communication to users outside of the project

team, but should also establish guidelines of how communication within the project team is to occur. Based on facts gathered during the assessment, design a plan that specifies who communicates what and when, to which group, and by what method. For internal team communication, design a plan that includes how progress reports, design changes, major events, availability of prototypes, and demonstrations are handled.

Training plan

One of the most important parts is the training plan. The training plan establishes who attends training, when training occurs, what needs to be trained, and by what means training needs are fulfilled. This not only ensures that end users are trained on the day the system goes live, but, for example, ensures that content providers are familiar with the methodology and development tools.

Design organizational development plan

The organizational development plan specifies the tasks and methodology that ensures that e-Learning deployment aligns closely with the organizational structure. The design not only focuses on processes, but also on how resources are organized and deployed. In many organizations organizational development is part of the human resources function, and any changes assessed in phase one should have been assessed with the help of human resources professionals.

Design business processes

Any new business processes and procedures that have been identified, as well as those seen as being broken, need to be planned. The design not only involves the process, but also how the system facilitates the process. In addition, you need to validate the design, and you must consider any impact on dependent processes.

Design the support structure

This design specifies the responsibilities for supporting any incidents arising during and after the deployment. It should include incident levels and support level matrices, and should outline minimum acceptable response times. If a vendor provides support, it is a good time to begin the selection process.

Design roles and responsibilities

This step deals with designing user roles and responsibilities as well as user permissions. The design should include hierarchical roles based on the organizational assessment.

Design changes to organizational structure

Any change to the organizational structure requires some form of plan, such as designing job descriptions for any added administrators, or specifying how changes to the reporting structure will be facilitated.

Summary of the design and selection phase

At this time there should be no more unknown factors in any area, and you should have answers to all questions on how to deploy e-Learning. All affected team members and departments should be clearly in the picture — not only that change will come, but what will change, and how the change will be accomplished. At this time the various clearly separated managed areas during the assessment phase begin to re-connect, such as the training plan being dependent on the organizational structure and content development strategy.

Implementation

You could also call this phase development, but because any deployment requires so much development of specifications and documents and plans at each stage, a different name was needed. This is the time where you'll hire contractors and vendors to bring the plans and designs to fruition.

Implement technology solution

In this step you'll work together with system vendors and your in-house IT departments to ensure that the assessed technology needs and the LMS or LCMS will be implemented as designed. In rare cases this managed element of the deployment might be combined with content integration, as some IT departments centrally manage all software deployments, including the software used to create content. It may be that the software used to create content is actually part of the LMS or LCMS package.

Configure and program the system and develop customizations

The vendor that will supply the LMS will most likely be supplying the consultants that install and configure the system — even though there are exceptions. If the system is being developed in-house, the implementation process will most likely be under the umbrella of the IT organization to ensure that the system complies with IT rules. This area may also flow together with other areas, because any data interfaces that were identified in earlier phases will be developed. The primary task for the deployment team is to manage the project timelines, and to ensure that development coincides with established business processes and procedures.

Data migration

Whether this is a new deployment or a replacement, you need to populate the system with data. This data consists of users, organizational structure, the course catalog, and every other type of data that was identified through the assessment phase. Not only do you transfer the data, but it may also be transformed to fit the needs of the new system. It is critical to validate that this process has not compromised data integrity.

Testing of functionality against business processes and procedures

As you reach every major milestone in implementing the functionality of the system, you need to test and validate it against the design documents. And you need to validate any deviations from the design document to ensure that business processes and procedures are not disrupted by the deviation.

User acceptance testing

Don't forget the end users. Does the developed product align with reality? The thorough assessment phase should ensure that the majority of all functionality is well aligned with the real-life tasks that are to be performed. Because business is ever changing, in some instances a process might have been changed without that change being documented in a design document.

Content strategy implementation

This step is most likely the most time consuming, especially if there is a lot of existing content that needs conversion. While this document treats each of the managed areas in sequence, in reality, content conversion and creation has been an ongoing process while implementing the technology solution. This is a good time to demonstrate the system's capabilities to end users and stakeholders.

Convert existing content

Existing standards-compliant content needs to be validated for functionality and migrated to the new system. In some cases you need to move assessments (tests and quizzes) separately from the content. Content that is not standards-compliant needs to be re-engineered to migrate to the new system.

Create content though vendors or in-house

New content might have to be developed and be ready for go-live if this deployment is completely new. Developers might need extensive coaching and close project management if you have deployed a new development methodology, such as rapid learning,

Order off-the-shelf content

This step might seem simple, and most of the time it is, but you must validate proper functionality.

Create media elements

A new system and new content methodology almost always provides the ability to explore new content media types. Not too long ago, video over the Web was unthinkable, while today it is reality. Software simulations have historically been prohibitively expensive, but recent advances in development tools have made them very affordable. These new media elements need to be developed and tested.

Change management plan implementation

During this stage communication within and outside the core teams continues, and training activities take place.

Send communications as defined by plan

As I mentioned earlier, this chapter treats the separate managed elements in sequence. In reality, several parts of the change management plan will already have been completed and been communicated. Communication to stakeholders and end users becomes more critical as the go-live date approaches. This does not only include announcements to end users, but also progress and budget reports to the business sponsors.

Deploy training according to plan

As with the previous step, some training might already have occurred for select audiences, however the majority of training, as defined by the assessment, occurs as soon as you have developed the system to a stable version.

Organizational development implementation

This step is largely the result of collaboration with other departments on the organizational needs. The resulting assessment and design documents from previous phases outline the tasks to be performed in the step.

Load user profiles and qualification catalog

This step has been included here because it not only consists of a data set, but also reflects any changes to the organizational structure such as the relationship between positions, jobs, people, qualifications, and courses.

Implement new business processes

You must implement any new or modified business processes, and associated training needs to occur. You build the support structure for the new system at this time.

Implement changes to job descriptions

Implement any changes to job descriptions and communicate them across the human resources and recruiting organizations, as well as to affected individuals and their managers. These changes not only affect the job descriptions, but the people that hold these jobs, including the consequences of eliminated or significantly changed positions.

Summary of implementation phase

The implementation phase can be hectic and overwhelming for any involved person. A good design plan and solid project management will ensure that the deployment stays on track. This phase can also be exciting, because months of planning become reality.

Go-live

This phase is most likely the most anticipated phase of all — though I will never understand the reasons for that. If all aspects of the project have been analyzed thoroughly, all design has been thoughtful, and all implementation has been completed thoroughly, there is no need for excitement and working into the wee early morning hours on the day of go-live. Go-live should simply consist of enabling the one file or setting that allows end users to access the live system. You should have completed every other aspect during an earlier phase. You should be able to sit back, relax, and have a little celebration — and the team certainly deserves it.

Evaluation

Like all the previous phases, the evaluation phase is broken into the same distinct managed areas. Generally speaking, this evaluation should occur between 90 to 120 days after go-live. This time range is a suggestion, and evaluation can occur as soon as you can collect meaningful data — generally you need at least 10% utilization before a statistical trend can be predicted. You should collect the feedback received during this phase, and evaluate it for Version 2.0 or for the first maintenance update.

Evaluate technology solution

During this evaluation you analyze the system. Is the functionality as expected across all functional areas? Are there any bugs? Are there workarounds for bugs or deficiencies? Is the reporting of data as expected?

Evaluate content

You need to evaluate content against the performance model chosen during the design phase. Many organizations align their performance evaluation on the Kirkpatrick model. Does the content provide the expected results in participants? In addition, there may be minor inconsistencies between content and real-life processes and procedures that may need to be fine tuned.

Evaluate change management

You should document any lessons learned in this area. How did the user population react to the

change communications and the system implementation? What impact (either positive or negative) did vendor relations have on the project? What were the major obstacles, and how were they overcome? Did training occur for the correct audiences when needed?

Evaluate organizational change

This last area is the most important one from a strategic point of view — and it is the one question stakeholders will ask — probably before the data is available: What was the return on investment (ROI)? It is, after all, a business decision to implement e-Learning — so there should be an anticipatable profit from the investment — or a significant reduction in cost that offsets the investment. The ROI should align with the needs analyses — the very reason why the system was implemented in the first place. ROI can be calculated in many ways, and there are many good books and guides on the market to explore this topic deeper. We will focus on three main areas.

Quantitative benefits

Quantitative benefits are those that you can easily measure, and the most interesting quantity to stakeholders is the amount of money saved or received as income. How many hours of instructor-led training were delivered via e-Learning? How many travel dollars did that save? How many more hours of customer face-time did that provide to the workforce? How much additional sales revenue derived from that additional face-time? Another example may be a technology roll-out that used e-Learning for performance support. How many fewer calls to the help desk? How much money did the reduced call volume save? How many more services can a tech perform because they don't have to call the help desk? How many fewer errors occurred because support is available where needed? How many dollars did that error-reduction save?

Qualitative benefits

These benefits are important, yet hard to translate into firm dollar figures. They may include a more motivated employee base, confirmed though a survey. But it is hard to link that directly to a dollar figure. Another benefit might be a reduced product development cycle, because the associated training rolls out faster. That is especially true in telecom and technology industries, where an entire product life-cycle can be shorter than a traditional training development cycle. In these types of situations, e-Learning is an enabler, but you cannot credit it with a firm dollar amount — either because the data does not exist, or the relationship between income and e-Learning-based training delivery is too indirect.

Unrealized benefits

You will usually realize these benefits somewhat later than quantitative and qualitative benefits. They include all types of benefits that were not part of the original needs assessment. An elevator company, for example, might experience a reduction in traffic accidents, because there had to be fewer trips to correct installation issues. In another very interesting scenario, an organization realized that their LMS and e-Learning development method was so effective that they abandoned their traditional IT-managed Internet and Intranet and transitioned them to the training department — now known as the Corporate Communication and Change Management Department.

Summary of the evaluation phase

The evaluation phase proves the effectiveness of the project, and records the lessons learned. It provides business meaning to the entire project — because if the ROI does not align with the identi-

fied organizational needs, or if it provides a negative number, you cannot consider the project a success — no matter how innovative it might have been. If, on the other hand, it exceeds ROI expectations and the organization benefits from the deployment — the deployment must be considered a success — no matter how un-innovative or crude the solution is.

Conclusion

As mentioned in the introduction, e-Learning deployments (including LMS installations) can be challenging projects because they affect multiple areas in the organization though multiple phases, each requiring their own project plan — and to complicate matters, each area flows into another area. However, by using the pointers in this chapter, you can identify a starting point and realize a road map through the entire cycle of a successful deployment.

Adobe solutions for the virtual classroom: Opening the campus, extending the reach of the classroom

Online enrollments increased at a rate of more than 18% in 2005, compared with traditional enrollments at a rate of 4%.

Allen and Seaman, 2005

Today's eLearning landscape

For anyone who needs to learn a new skill, prepare for a new job requirement, or pursue a new career, eLearning can provide the opportunity to complete a training program or earn a degree without moving or leaving current employment. Adobe Systems is proud to be at the forefront of eLearning systems that extend the reach of the campus and corporate learning center. These systems give learners more ways to participate in education, training, and professional development experiences, on terms increasingly defined by learners themselves.

The Sloan Consortium annual online learning benchmarking report notes that more than 90% of all post-secondary institutions in the United States currently offer some variety of eLearning. Online enrollments increased at a rate of more than 18% in 2005, compared with traditional enrollments at a rate of 4% (Allen and Seaman, 2005). While non-traditional students (students over the age of 25) have typically been viewed as the target audience for eLearning programs, campus leaders are seeing that even campus-based students are turning to eLearning as a way to accelerate academic program completion or to enroll in a desired class that may not be available any other way.

The emergence of flexible virtual classroom systems

"Virtual classrooms" are distributed learning environments that can take advantage of synchronous experiences such as lectures, seminars, and e-mentoring, as well as digital online courses and flexible learning content creation and distribution. Virtual classrooms are expected to grow in adoption across all vertical markets due to their ease of use and increase in awareness about the benefits of deploying learning management systems (LMS) and/or learning content management systems (LCMS) for managing many of the artifacts—such as syllabi, assignments, reports, even online chats, and shared virtual spaces to work on group projects—that are associated with virtual teaching and training activities. Today's flexible virtual classroom systems for eLearning create more demand for commercial– and community-produced learning content assets. Attractive offerings such as simulation-based learning, games-based learning, and mobile learning are also expected to drive the future demand for more and higher quality digital content assets.

Increasingly popular—and powerful—online options

The Virtual Classroom model of eLearning is one of several different ways in which eLearning programs are delivered on and off campus, and it continues to be the most familiar analogue for creating, building, and supporting eLearning programs. Virtual classrooms extend the structure and services that accompany formal education programs from the campus or learning center to the learners, wherever they may be located. The virtual classroom gives students the option of

completing learning through a number of different configurations. It can be made up entirely of online lessons, or it may include campus-based courses, where students join in from a variety of on– and off-campus locations for a real-time class session via the Internet. Virtual classrooms typically include some kind of real-time conferencing capability, as well as virtual spaces for collaborating on projects, working with study groups, and conferring with faculty advisors and external guest speakers. Virtual classrooms include capacity for secure document creation and sharing; they provide functionality for securely sharing papers and other "works in progress" for review and comment; and they provide students and faculty the tools for quickly and easily creating engaging multimedia learning resources.
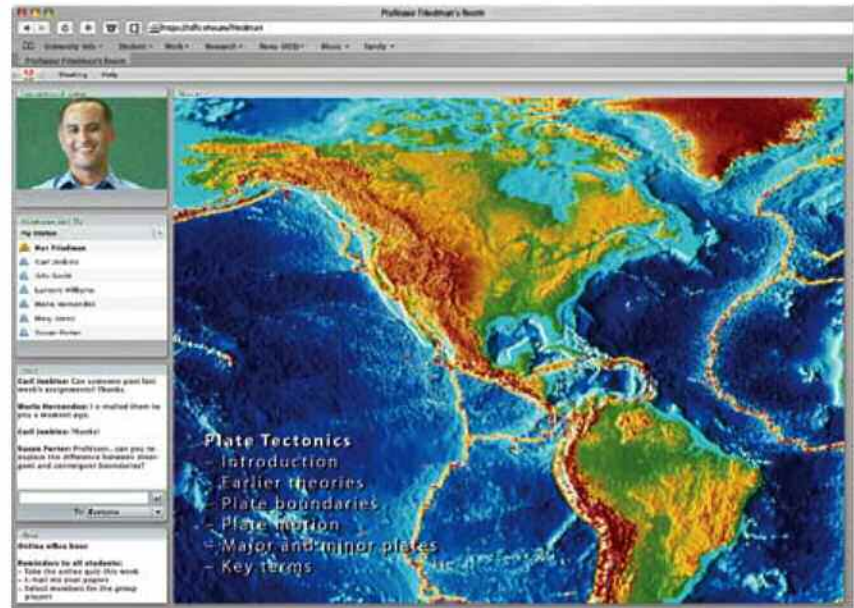
Using Adobe solutions, an instructor can provide formal online instruction and more informal "office hour" discussions with all participating students. With Adobe Acrobat Connect Professional, students can meet with an instructor in real time, reviewing media-rich content that the instructor can present on his or her desktop. All students need is a web connection.

Adobe solutions for the virtual classroom

Adobe—recognizing that great experiences enable great learning achievement—provides solutions for the virtual classroom that include industry-leading software:

- **Adobe® Acrobat® 8 Professional,** an ideal software tool for creating, combining, controlling, and sharing media-rich Adobe PDF files, delivers powerful solutions for improving communication and collaboration among eLearners and educators worldwide. An Acrobat workflow, featuring electronic Adobe PDF files, can simplify and enhance teaching and eLearning processes while providing safeguards that keep confidential information private. With Acrobat, it's easy to include a wide range of media in one file while preparing curricula and course packages, dynamic presentations, and other eLearning material that can be distributed instantly. And with easy-to-use commenting tools, which can be enabled for users of free Adobe Reader® software (versions 7 and 8), Acrobat provides a fast, efficient way for educators to give clear, direct feedback on students' work—a key element to the success of any eLearning solution.

- **Adobe Acrobat Connect™ Professional,** formerly known as Macromedia® Breeze® Meeting, makes it easy to teach, learn, and collaborate with virtually anyone, anywhere. This rich web communication system lets educators teach in real time, or deliver narrated presentations that students can view at their convenience. From virtual school initiatives and curriculum management to rapidly providing professional development, and everything in between, Acrobat Connect Professional software delivers high-impact eLearning solutions that everyone can access instantly.

- **Adobe Presenter 6,** formerly known as Breeze Presenter, simplifies and accelerates the creation, delivery, and sharing of media-rich presentations for teaching, learning, and collaboration. Adobe Presenter 6 ensures participation by reducing technical barriers. The software delivers online presentations using Adobe Flash® Player, which already is installed on 98% of desktops globally, so almost all eLearners can have instant access without cumbersome downloads.

- **Adobe Captivate™ 2** empowers educators to create engaging simulations, demonstrations, and scenario-based eLearning without programming knowledge or multimedia skills. Captivate automatically generates interactive content in Flash format, without requiring users to learn Flash. Educators can record on-screen actions, add eLearning interactions, create complex branching scenarios, and include rich media content that truly engages the eLearner.

Benefits to your educational institution

eLearning has found a particularly loyal and growing audience among working adult learners. And eLearning increasingly is being selected by campus-based students as part of face-to-face classes, as well as in online and blended eLearning programs. Educators in myriad environments—from traditional campuses to technical institutions to completely online programs—are discovering the benefits of Adobe Solutions for eLearning.

- **Extend the reach of teaching resources.** Adobe solutions for eLearning enable institutions to offer more classes … to more students. The virtual classroom solutions provide individuals and institutions with a foundation for extending the reach of degree, certification, and professional development programs.

- **Enhance learning experiences.** Courses now may include many options for delivery, an important attribute considering the work demands that do not disappear amid training demands. As workers become increasingly mobile—and today, a worker is considerd to be a mobile worker if he or she is out of the office more than 20% of the time—the importance of supporting performance at the point of need is accelerating interest in mobile learning and decision support tools, interactive checklists, podcasts, and VOD (video on-demand) casts.

- **Engage students.** From gaming to virtual mentoring, there are new and exciting ways to catch eLearners' attention … and keep it. These new trends in the learning industries are increasingly being numbered among the most successful strategies for supporting the learning and performance needs of NetGens, Millennials, and Boomers alike—an important challenge facing today's learning professionals working across all sectors.

- **Efficiently deliver learning resources (live or on-demand).** With a virtual classroom foundation for eLearning, faculty and students have the conceptual structure of a formal classroom experience that can be augmented with a wide array of on-demand and real-time modular learning content resources. Built on top of the Adobe Connect Enterprise Server, these modules provide specific functionality to make it easy for educators to collaborate and teach virtually anywhere, anytime.

Learn more about Adobe solutions for eLearning

Visit www.adobe.com/education/products/acrobatconnect.html to learn how Adobe Acrobat Connect Professional software can make it easy to teach, learn, and collaborate with virtually anyone—anywhere, anytime. And visit www.adobe.com/resources/education/k12/pres_train/ to learn how the Adobe Presenter and Adobe Connect Training applications for districts and campuses help simplify and accelerate the creation, delivery, and sharing of rich media presentations and courses for teaching and learning.

For more information, visit www.adobe.com/education.

Better by Adobe.™

Design Strategies for Online and Blended Learning

By Patti Shank

Although the grandiose assertions that e-Learning would take over *all* instruction never materialized (as if …), the use of technology for learning is quickly becoming ubiquitous. That is, people no longer see it as separate from "regular" learning, and it is viewed as part of the tools that trainers, instructional designers, instructors, and others who design or deliver instruction use to impact skills and performance.

Companies have implemented diverse approaches to using technologies to meet their training needs and good and not-so-good outcomes have helped us better understand what works well, less well, and not at all, and in what circumstances. Synchronous e-Learning systems such as WebEx™ or Adobe® Connect™ were a natural first step for many, because synchronous online training feels the most like what trainers, subject matter experts, and learners were already used to — someone presenting to a group of people. But a synchronous approach reduces the "any time, any place" aspect of using the Internet to learn to "any place" so this approach isn't best for all training needs. Initially, some began by putting content such as Microsoft® PowerPoint® slides and manuals on the Web, and had to learn the hard way that while this may indeed be content (and not very good content at that), it isn't instruction. Some who built custom self-paced e-Learning have been dismayed to find that getting staff to use it, and making it work on their Learning Management System (LMS), is far from a walk in the park.

Recently, people have promoted rapid e-Learning as a panacea to overcome the typical tribulations of e-Learning design and development, including long development cycles, high cost, and need for high-end design and development skills. Rapid e-Learning *can* reduce time, cost, and need for advanced design skills, but it's not any more of a panacea than other one-size-fits-all approaches.

This chapter concentrates on four key design strategy decisions that e-Learning designers and developers should consider, and the criteria for considering them. They include deciding whether:

- instruction or information is needed;
- face-to-face classroom, online, or real life approaches will work best;
- synchronous or asynchronous instruction makes the most sense;
- a traditional or rapid design approach should be used to build the materials.

One size does not fit all (learners, courses, organizations). The

Contents

In Chapter 3 you will find information about:

approach taken for retail clerks in stores with limited Internet or network access needs to be different than the approach taken for office workers who have all-you-can-eat Internet and network access on their desks.

Just as different audiences and access to network resources merit different approaches, so do different types of courses. For example, company A's onboarding process for new salespeople starts out with self-paced product lessons and assessments and then real life job shadowing with experienced reps. Product updates use a rapid get-it-out-the-door-because-it's-needed-NOW approach, utilizing a PowerPoint with narration to Adobe® Flash® tool (such as Articulate® Presenter™ or Microsoft Producer™). Initial sales training uses online branching scenarios (using a tool like Adobe Captivate™ or Flash, Articulate Engage™, or NexLearn™ SimWriter™) with classroom-based practice sessions.

You wouldn't want to force all instruction into one box, would you? (I'm being sarcastic, in case that's not clear; too many do just that, with less-than-acceptable results.) The right approach begins with a well thought-out plan that identifies key business needs and how training and other performance interventions will support them. A training plan should identify which of the approaches described in this chapter will be used and why. Research shows that organizations that put adequate effort into planning are significantly more likely to be satisfied with training outcomes.

There are many complex decisions to make when e-Learning is part of the mix. Welcome to the e-Learning-can-make-you-tear-your-hair-out club. I paid the first year's dues on your behalf.

Strategy decision #1: Instruction or information

The first strategy decision is what type of content you need to build. Table 3-1 shows various types of content and where they would typically fall on a continuum from instruction to information. Instruction generally requires much more effort to design than information. Where a certain project (or piece of a project) falls on the continuum will help you determine what other approaches make sense. For example, informational content rarely deserves as much time and effort as instructional content. An example of hybrid information and instruction for software product updates for field sales would be instructional demos of new features and Q&A sessions delivered through Webinars, while the information for field sales would be downloadable PDF files describing features, specifications, and benefits (useful as information and performance support).

Instruction has a specific purpose — to change learners' knowledge and skills for a specific purpose. In a training environment, you build instruction to change what workers do on the job and to positively impact important business goals. Instruction typically includes assessments, activities that help learners practice, and content that helps learners perform well on activities and assessments. The typical purpose of information, however, is to increase comprehension. Should you build instruction, information, or both for a given training project? Take a look at the attributes shown in Table 3-2 on page 29 and see which of them apply to the project. And if both apply, consider a hybrid instruction and information solution, as described in the software product updates example.

Table 3-1

Instruction — information continuum

Instruction	Information
←	→
Module, lesson, course, tutorial, demo, game, practice, simulation, quiz, test	Who, what, why, when, where

Strategy decision #2: Classroom (face-to-face), online, or real life

Another important strategy decision is whether to use classroom, online, or real life (also known

Table 3-2

Attributes of instruction and information

	Instruction	Information
Purpose	Gain skills via practice and feedback	Improve comprehension
Audience	Often built for narrower audiences	Often built for wider audiences
Content	Purposely limited, may link to additional content	Often less restricted to meet wider audience needs
Interface	Simpler interfaces, reuse so users know what to expect	Less restricted content requires careful interface design and testing
Activities	Support learning and transfer	Quickly locate information
Multimedia	Use when needed to improve learning, don't use gratuitously	Use when needed to improve comprehension, don't use gratuitously
Assessments	Test, performance, real-life performance	Survey, multiple choice questions

Table 3-3

Benefits and challenges of classroom, online, and real life learning

	Classroom	Online	Real life
Benefits	Immediate feedback and support Social aspects Immediacy of feedback Easy to see performance	Easily scalable Possible to customize Easier tracking Easier standardization Potential for increased participation Incremental cost is lowered when spread over wide audience	Real examples, not made up Immediate feedback and support Able to see the full complexity of job skills Mentoring or coaching over time is possible
Challenges	Usually linear, more time-bound Participation is limited by available time and need to "cover" content Travel greatly increases cost Not easily scalable	Boring when not enough consideration is given to interaction needs May be challenging to use Delayed or nonexistent feedback and support is common May feel "remote"	Non-standardized quality of on-the-job trainers and training process Can be time-consuming May need to limit practice for safety and other concerns Learner may be overwhelmed

as on-the-job) learning environments to best meet the needs of learners and the organization. In reality, a combination is often best. Learners scattered around the globe will have better access to training if it is available in self-paced modules online. A new call-center employee may sit with, and listen in on, a successful call-center employee's calls in order to learn how to handle a variety of real-life call types. People learning conflict management skills are likely to have better practice opportunities in a classroom. Practice in cleaning up hazardous waste spills would be best using a real spill, but it would be too dangerous (and unethical). And since there are (happily) few *real* opportunities to practice these skills, simulations make more sense.

In many cases, the best approach is one that works *and* is also possible.

Table 3-3 shows benefits and challenges of classroom, online, and real-life instruction. Because they have different benefits, a combination is often optimal. This approach helps makes it possible to gain the benefits of all while mitigating the challenges. For example, online instruction, combined with classroom for live practice. Or an online course combined with fieldwork and a few face-to-face meetings.

The question I am asked most often is, "How do I do _____ (fill in the blank with an activity type) online?" Table 3-4 on page 30 shows that classroom, online, and real-life learning environments have different components that can be used for the same purpose.

All activities DO NOT need to happen online, even in a primarily online course. For example, Maricopa Center for Learning and Instruction's Writing HTML course (http://www.mcli.dist.maricopa.edu/tut/) uses online lessons, but you practice on your computer, outside of the course. In general, I believe we use far too few real-life practice elements in our courses.

Strategy decision #3: Synchronous or asynchronous

Technology-based instruction is typically delivered in a synchronous manner (live, same time, different locations) or an asynchro-

nous manner (self-paced or group-paced, different times and places) and the designer needs to determine which (or what combination) of these will work best. Table 3-5 shows some of the benefits and challenges of asynchronous and synchronous online delivery.

In my experience, synchronous instruction is more compelling than asynchronous instruction, all things being equal (which they rarely are). To be compelling, the presenter must know how to use synchronous systems to their best advantage. But synchronous instruction has some major drawbacks, such as needing to have participants there at the same time (a recorded session is not as compelling).

The benefits and challenges of synchronous and asynchronous delivery plus examples of each should help you select delivery modes that make the most sense for a given situation. A combination often makes the most sense because it provides the benefits of both while mitigating the challenges. For example, an asynchronous module combined with a Web conference to discuss critical issues. Or a Webinar, followed by asynchronous discussion to answer questions and share resources.

Strategy decision #4: Traditional or Rapid Instructional Design

Traditional instructional design, especially when applied to e-Learning, commonly uses a detailed process that takes months or longer. (It's no joke when instructional designers say that by the time the course is completed, it's often out of date.) It typically involves a fair amount of analysis, a design team with multiple skills, and iterative cycles of design, development, and formative evaluation before implementation. This approach makes sense when there is a need to assure critical job skills

Table 3-4

Instructional components for classroom, online, and real life learning environments

Purpose	Classroom components	Online components	Real life components
Content delivery	Course workbook, presentation slides	Lesson, animation, slides with narration, Webinar	Policies, manuals, job aids
Activities	Exercises, simulations, cases, learning lab	Demo, simulation, tutorial, cases, problems	Job shadowing, what-would-you-do-if scenarios, real life practice
Assessments	Checklist, test, performance	Checklist, test, simulation	Performance
Support, feedback, and help	Instructor, peers, instructional materials	References (online and print), performance support tools, application sharing, ask the expert, searchable documentation, resource lists	Supervisor, on-the-job trainer, other workers, real life resources

Table 3-5

Benefits and challenges of asynchronous and synchronous delivery

	Synchronous	Asynchronous
Benefits	Time set aside Real-time demonstrations Immediate feedback Visual cues (gauge emotions, understanding) Better for poor reading and writing skills Instructor directed	Convenience Access at work or home Time to reflect Lack of visual cues (privacy) Standardized content Review materials as needed Self-direction
Challenges	Inconvenience and logistics — time zones No time to reflect Event oriented Instructor control	Lack of immediacy Lack of visual cues (potential for misunderstanding) Frustration when needing help Easier to avoid
Examples	Webinar, application sharing, chat, instant messaging, real-time collaboration, audio conference, Web conference	Self-paced module, discussion forum, tutorial, archived Webinar, collaborative writing tools

and outcomes but is too costly and time intensive for many training projects.

Figure 3-1 shows the steps of traditional instructional design, and the arrows indicate that there is a great deal of iteration built into the process. The cost for traditional asynchronous self-paced online learning ranges between $10,000 and $100,000+ per hour of learning (typically depending on amount and complexity of programming and multimedia elements). This is cost-prohibitive for materials that are quickly outdated or for less critical training.
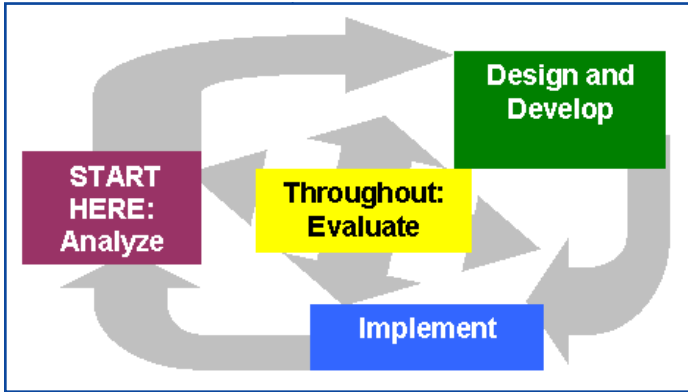
Rapid instructional design is the name given to instructional design methods that allow for building and delivering instructional content in days or weeks, rather than the long period of time it normally takes to build instruction according to more traditional instructional design methods. It is best to use it for instruction that focuses on knowledge (as opposed to skills) and for information that requires very rapid dissemination.
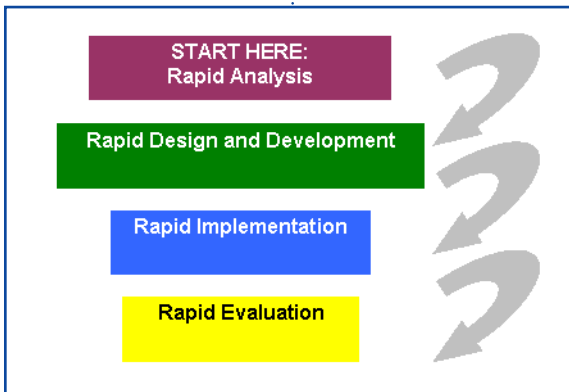
A rapid instructional design process, shown in Figure 3-2, follows similar steps as a traditional instructional design process but eliminates many of the sub-steps and has far less iteration. Compare the sub-steps of the Design and Develop step in both processes. The effect of reducing sub-steps and iteration is a reduction in time and cost.

Given reduced time and costs, should you use rapid instructional design for all e-Learning projects? NO! Some training projects merit the increased time and costs, and I'll discuss why in the next few sections. The choice to use a traditional instruction design approach or a rapid design approach depends on numerous factors, including the:

- level of instructional objectives
- need for skill mastery
- time sensitivity of the content

The next section will discuss these three factors.

Level of instructional objectives

Figure 3-3 shows a pyramid of instructional objectives, with the lower tiers constituting "KNOW" objectives and the higher tiers constituting "DO" objectives.

Typical instructional design is often the right choice for upper-tier instructional objectives. Rapid instructional design is often a good choice for lower-tier instructional objectives. For example, *List the benefits of a Roth IRA* is a lower-tier instructional objective. But *Develop a care plan for a critically ill child* is a higher-tier instructional objective. The care plan objective involves critical job skills for a medical care manager, and the time taken to confirm these skills is likely worth additional time, cost, and iteration.

Typically, it is best to use rapid instructional design for instruction that can be considered disposable. Disposable doesn't mean it's not worthwhile, though. It means that the instruction either doesn't merit the intense design effort needed for higher levels of skill or mastery, or that the content is extremely time sensitive, changes rapidly, or goes out of date quickly.

Figure 3-1
Traditional instructional design process

Figure 3-2
Rapid instructional design process

Figure 3-3
Pyramid of Instructional Outcomes (Adapted from: Bloom's Taxonomy)

Skill mastery

Mastery of a skill takes time and practice, input and reflection, chances to fail and to gain feedback and support. It is critical to consider *what degree* of mastery you need. Figure 3-4 shows how design strategy typically becomes more rigorous as the need for skill mastery and the need to measure real-world skills increase.

The upper right section shows that when the need for skill mastery is high (for example, giving patients the *right* medication), and the need to assure that these skills have been attained is high, that is, the need to measure real-world performance rather than using tests (which are necessarily less rigorous than actual job performance), you likely need a more rigorous design process.

The lower right section shows a situation where the need for skill mastery is high but there is less of a need to measure real world performance. When the need for skill mastery is low and the most important thing to measure is attendance, design effort can, and often should, be quite low.

It's important to understand that the choice of design methodology isn't an all or nothing proposition. You can use rapid instructional design for portions of a course or curriculum, even if it isn't appropriate for the entire course or curriculum. Instructional objectives for a given course are typically a mix of lower- and upper-tier objectives. So, for example, for a business ethics course, you might use a rapid instructional design approach for an overview and a lesson on ethics terminology. And you could use a more rigorous approach to build scenario-based lessons.

Figure 3-4
Mapping design effort to need for skill mastery and measurement

Time sensitivity

In addition to the level of the instructional objectives and the need for skill mastery, time sensitivity plays a key part in the choice of design approach. Some training (or information) is needed yesterday, or has a short shelf life. In this kind of situation it's better to deliver useful training or information now than to deliver optimal training too late. An approach often used successfully when content is time sensitive but not disposable, is to use a rapid instructional design approach now, and use a traditional instructional design approach to deliver more optimal training later.

An example of using the two instructional design approaches in tandem is training needed for a major application change in the organization. You can use rapid instructional design to provide pre-launch information, while you can use a more traditional approach to develop task-based training and performance support for the long run.

Traditional and rapid design steps

In this section, I'll discuss the steps of traditional and rapid instructional design so you can see the similarities and differences, and more importantly, how you can apply these steps to different training projects. Even if all factors point to a need for a more rigorous (traditional) instructional design process, you can and should learn a great deal from rapid instructional design practices to speed up traditional design.

Traditional and rapid analysis

In traditional instructional design, the training process commonly begins with gathering information. Table 3-6 shows a list of questions commonly used to determine what direction to take. Even if timeframes are short, it typically pays to begin by gathering a minimum of information to focus design efforts. The bolded questions are often useful for a rapid instructional design project. If the answers to these questions indicate that there are too few resources (content, time, etc.) or the desired outcomes cannot be produced using a rapid approach, it's time to negotiate with the person who wants this done about what can be done with these resources and this approach, or what approach is needed to obtain the desired results.

Table 3-7 on page 34 shows an example of a rapid analysis completed in response to a request for training so you can see what a rapid analysis might consist of.

Analysis takes time. When you need to deliver information or instruction "yesterday," some feel that analysis is expendable. (And occasionally they are correct.) Others suffer from "analysis paralysis" and never feel they have enough information. Waiting to have every last detail is a problem when information needs to get out quickly. There's a fine line between gathering enough information to improve the odds of success and taking too much time.

Whether using a traditional or rapid approach, here are some proven ways to gain information quickly. Some may not be appropriate in all situations and a combination of ways is often the most helpful in any given situation.

- Develop and use an analysis template to guide the analysis process
- Use an online survey tool (such as SurveyMonkey.com) to gather data
- Develop a short analysis from what you already know, and then ask key stakeholders to edit it
- Find information in places outside of peoples' heads, such as company reports, e-mails, etc.
- Not designing *any* training (and doing something else like developing job aids or nothing) is one of your options

Traditional and rapid design and development

Once adequate analysis is complete (adequate means there is enough information to justify the approach taken and the resources to use), design and development typically gets underway. Table 3-8 on page 35 shows a list of traditional design and development

Table 3-6

Traditional analysis questions

Analyze what?	Typical questions
Goals	**What problem needs fixing? Why?**
	What are the most critical outcomes for this project?
	Who are the primary stakeholders for this project?
	What specific indicators will they use to measure success (cost, quality, time)?
	How is the content used in the real world (on the job)?
Learners	**Who are the learners for this instruction? Any special needs?**
	What are their goals for this instruction?
	What do I need to know about the learners when developing these materials (age, language, disabilities, educational level, computer literacy and skills, access, location)?
	What do these learners already know?
	What support will they need to be successful?
Resources	**When does it need to be completed?**
	Is content already available? In what format?
	Is a content expert available to help?
	What existing resources are available (people, skills, time, budget, software, content)?
	What organizational constraints are in place for this project?
	When and where does the instruction need to be delivered?
	What delivery technologies can be used?
	Do learners already know how to use these technologies?

steps (and the questions that you must answer in each step). You check the C column if you typically perform this step for classroom training design and development, and the E column if this step is typically performed for e-Learning design and development.

Rapid instructional design commonly reduces design and development steps and uses tools that facilitate building content and assessments (if needed) very quickly. The steps used in the design and development phase for rapid instructional design may vary, but it is typical to eliminate all but steps 1–3, and 9.

Content development often takes a great deal of time, so rapid instructional design is best used when content is available or easily obtained. Lack of available content (and people who can develop and evaluate it) is one of the single biggest risk factors associated with rapid instructional design. That's why it's CRITICAL, before taking on a rapid instructional design project, that you make sure that adequate content is available, or that you will be able to obtain it.

Whether using a traditional or rapid approach, here are some proven ways to speed up design and development. Some ways may not be appropriate in all situations, and a combination of ways may be most helpful in any given situation.

- Teach content experts how to do part or all of the work (it's not rocket science; they can learn).
- Find information that is already available and can be repurposed (PowerPoint presentations, reports, documents, e-mails, etc.).
- Develop and use content forms and let content experts fill them in.
- Have content experts fill content into page templates.

I will describe the last two ways to speed content development in more detail next.

Content Forms

Since the content-experts' time is almost always at a premium, and they often do not know what content is needed, it helps to provide them with forms that help them focus on the elements you need.

Developers often use forms to gain content for the following elements:

- Introduction
- Content text and critical points

Table 3-7

Rapid analysis for approved time-off training

Approved time-off training

Problem	There is confusion about what constitutes approved and unapproved time off, and some managers and staff are interpreting the policy inaccurately.
Needed outcomes	Employees and managers will be able to tell the difference between approved and unapproved time off, and will be able to list the steps for requesting and using time off.
Delivery date	Delivered October 15 – 26 (10 days until delivery)
Available content	The employee policy manuals will provide the bulk of the content. This is available in electronic format. Judith will be available to develop and approve content.
Available technologies	Company computers have IE 6.0, Flash 7 Player, Adobe PDF Reader, audio. Training department has MS PowerPoint, Articulate Presenter, and Adobe Acrobat.

Work plan	Work plan	When	Who
	Give time-off content form to Judith and locate available content	Friday (today)	Carlos
	Review content form and existing content	Monday	Judith, Carlos
	Determine learning objectives	Monday	Judith, Carlos
	Build content and assessment questions	Tuesday - Thursday	Carlos
	Review content and assessments	Thursday	Judith
	Revise content and assessments	Friday	Carlos
	Sign-off on content and assessments	Monday	Judith, Carlos
	Sign-off on training	Wednesday	Judith, Carlos, Sandy
	Test internal, fix	Thursday-Friday	Marti, Felix, Carlos
	Delivery	Monday, October 15 – Friday 26	

• Examples and non-examples
• Quiz questions
• Next steps
• Wrap-up

Table 3-9 on page 36 shows an example of a content form used by a training developer to get targeted content from a content expert. Helping content experts to focus on specific pieces of content is less frustrating and gets to key content faster, a very critical outcome for rapid instructional design.

Table 3-8

Typical design and development steps

C	E	Step	Questions answered
✔	✔	1. Define instructional objectives	What will the learner will be able to DO as a result of instruction? How does this content get used in the real world?
✔	✔	2. Gather content	Is there existing content? Is it in a useful form? Do we need more or a different format? What content experts will help us? Do they have the time needed?
✔	✔	3. Determine content, activities, assessments, and support	How will achievement of learning objectives be assessed? What activities are needed for practice? What content is needed to support the activities? For e-Learning, what media and tools will be used to support content, activities, and assessments? What types of support will learners need to be successful?
	✔	4. Determine interface and screen design	What look and feel is needed? How will learners enter and get around? What standards should we adopt for: • Page and site structure and navigation • Backgrounds and graphical elements • Colors • Text-font, color, size, word usage
	✔	5. Develop a prototype	What snippet of content, activities, and assessments should we develop in order to gain feedback from stakeholders before starting full scale development?
	✔	6. Perform formative evaluation on prototype	What changes are needed to the interface and screen design, content, activities, and assessments? (It is cheaper to catch problems and mistakes before instruction goes live!)
	✔	7. Flowchart/storyboard	How will we describe content, activities, and assessments so content experts can review content prior to development? How will we describe content, activities, and assessments so developers know what we want?
	✔	8. Perform formative evaluation on storyboard	What changes are needed to the content, activities, and assessments before full development commences?
✔	✔	9. Complete design	Develop learner and instructor materials (if needed), including content, activities, assessments, presentation materials, etc.

Slide templates

Having content experts enter content directly into a more or less final delivery format makes rapid instructional design even faster than getting content from them, and then building the training materials. There are some caveats about this approach. Content experts may need help with:
• determining objectives;
• mapping content to objectives;
• determining what content is critical;
• being concise;
• writing, spelling, and grammar;
• sequencing;
• writing assessment items.

Many people in the training or instructional design field don't think that content experts can develop adequate instructional content. Whether you feel that way or not (I don't), making content development the exclusive domain of trainers or instructional designers often creates bottlenecks, forces content experts to go around established procedures, and potentially lowers access to instruction. A better plan is to provide content experts with good templates to use (that embed part of the instructional design process within them) and train them in how to use them to design good instructional content!

These ideas often help content experts to enter content directly:
• Providing preformatted PowerPoint templates (which can be brought into a Web conferencing system or narrated and output as a Flash object)
• Allowing editing of specific content (often referred to as "editable regions") on Web pages with a

tool such as Adobe Dreamweaver or Contribute
• Providing access to simple-to-use authoring tools and templates in content management systems
The first step, when using the templates approach, is to develop a list of slide types. If you look at the Slide Design templates in PowerPoint, you'll get a good idea of how this works. Here are common types of slides for instructional use: main page (course title), course introduction, objectives, topic introduction, text and bullets, text and image, quiz question(s), and wrap-up. Your needs may vary, so this list may need a little or a lot of tweaking. A good next step is to develop a graphic "look and feel" for these pages (slides, Web pages, document pages, etc.).

To give you an idea of what slide type templates might look like, Table 3-10 on page 37 shows a few PowerPoint slide type templates. A graphic look for each slide type is defined, as is the type of information that goes on each slide.

Whether using a traditional or rapid approach, here are some proven techniques for reducing design and development time.
• Make sure you have a commitment for content expert time in advance.
• Use content forms to help content experts provide just the content you need.
• Make sure other needed resources (applications, tools, etc.) are available as expected.
• Make sure the project is doable in the time frame before committing to it.
• Develop a clear project plan that includes tasks, responsibilities, and due dates.
• Use a central electronic repository for project files.
• Agree on a version control method and assure that all team members follow it.
• Have regular check-in meetings, by phone, audio, or Web conference.
• Manage iterations and scope creep.

Traditional and rapid implementation

Implementation isn't much different for traditional instructional design and rapid instructional design. The goal in implementation is to notify learners that the materials are ready to use, and to work out the inevitable kinks that occur. Two tried and true methods used by trainers to get people to "attend" training, and ways to be prepared for the kinks are described next.

Announcements

You can use announcements to make sure that people know in advance that the instructional materials are going to available and how to access them. Organizations promote learning in a variety of ways, including direct e-mail or training department newsletters. A key stakeholder, or each learner's supervisor, often announces and requests participation in especially critical instruction.

WIIFMs

People are busy, and no matter how valuable the topic there are often competing priorities. It's a good idea to provide a compelling rationale for the instruction and provide some clear WIIFMs (what's in it for me) when describing the session. A clear and compelling title is also important. For example "Market Changes" is probably not going to be as compelling a title as "How to Exploit Market Changes to Improve Your Sales."

If your Learning Management System (LMS) lists many

Table 3-9

Example content form for content expert to fill out

Topic	Key points	Screen captures
Why the new application is being implemented		
How it will speed up travel expense processing		
Key features		
How to use the online help system		
How to get help		

courses, and there's a possibility of the training getting lost in a list, consider using criticality or shelf-life icons or keywords to show which sessions need immediate attention.

Make instruction as convenient as possible. Consider timing for synchronous events. Determine if you will need to archive synchronous sessions so those who cannot attend can view it. Figure out ways to make instruction work for as many people as possible.

Working out the kinks

Even if you do a lot of testing before implementation, kinks are inevitable because it's impossible to test the materials under every possible condition. So be prepared, and assign people to do tech support on the course. Include a phone number or e-mail so technical problems can be resolved. And keep a log of real problems so you know to test them on future courses.

Traditional and rapid evaluation

Formative evaluation used throughout design and development helps to determine if the instruction itself needs improvements or adjustments. You shouldn't wait until the materials development is complete to test them. It's easier, less time consuming, and less expensive to make adjustments before instructional materials are completed. For e-Learning, doing this kind of evaluation all along the way may save you from a disaster. Formative evaluation, especially for e-Learning, should involve testing for:

- content accuracy,
- content sequencing,
- interaction and feedback adequacy,
- look and feel,
- site navigation, and
- broken links and interactions.

You use summative evaluation after the instructional materials are completed and learners start to use them in order to determine if the instruction meets the goals set out for it.

Donald Kirkpatrick developed the classic summative evaluation

Table 3-10
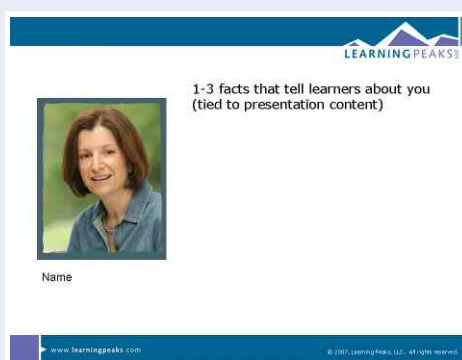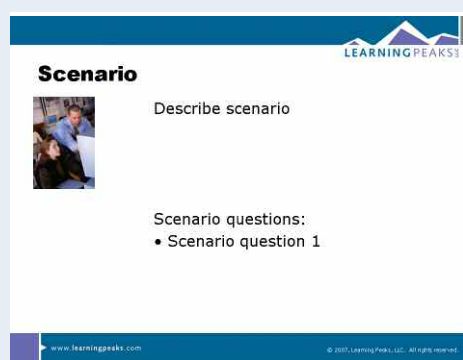
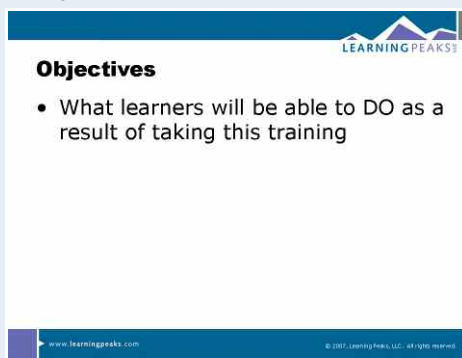### *PowerPoint slide-type templates*

1. Title

2. Introduction

3. Objectives

4. Definition
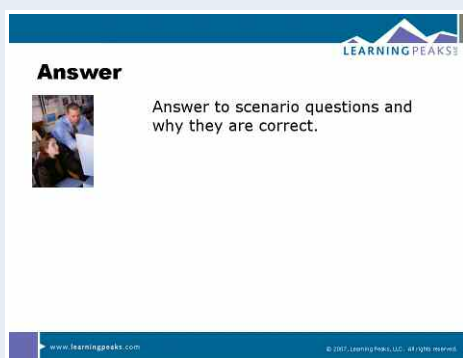
5. Scenario

6. Scenario answer

model in 1975. It purports to evaluate the course or program at four levels. (I say purports because it can do so to a greater or lesser extent depending on how well the evaluation is done.) Table 3-11 shows typical evaluation questions to be answered at each level, and indicators that can be used to answer those questions.

Rapid evaluation typically measures only reactions and learning because you should use rapid instructional design for lower-tier instructional objectives and content that is disposable. Sometimes, especially for informational content, nothing other than "attendance" is measured. Don't feel that you aren't a real trainer or instructional content developer if you don't do in-depth evaluation of each and every project. You have limited time and resources, and to use these effectively you should save in-depth evaluation for the kinds of training that fall into the rigorous and less rigorous boxes shown in Figure 3-4 on page 32.

Formative evaluation can take a lot of time, so it's important to plan reviews (in the work plan) and to limit the number of review iterations that occur if you're trying to get a rapidly designed course completed quickly. You should check all instructional content for:
- ease-of-use,
- content clarity and accuracy,
- all elements working as expected, and
- navigation and broken links.

If you want honest (and quick) feedback, round up a few members of the intended audience to look through the materials. Content experts should review the content for accuracy, but they often are not as good as general learners at providing input on ease-of-use, clarity, things working as expected, and navigation.

Making evaluation quicker involves determining which elements are most critical for the project and limiting evaluation methods to those which you really need. Summative evaluation for rapid instructional design is limited to level 1 or 2, in most cases.

Whether using a traditional or rapid approach, here are some proven techniques for getting what you need from evaluation without bogging down.
- Reuse and tweak practice elements as assessments.
- Build in ways to gauge if the desired results were achieved (surveys, quizzes, learner opinions).
- Use LMS quiz functionality to speed up the quiz development and analysis process.
- Don't consider doing level 3 and 4 evaluations unless the results will be truly valuable and used for making important decisions.
- Ready for radical? Go out and watch learners use what they learned.

Table 3-11

Evaluation questions and indicators

Level	Measures	Primary question answered	Typical indicators
1	Reaction	How do learners feel about the instruction?	• Satisfaction or attitude scores • Completion rates
2	Learning	Did learners achieve the learning objectives?	• Test scores • Skill performance • Progress along specified learning path (e.g., certification, job paths)
3	Transfer	Can learners apply the knowledge and skills to the job?	Job performance (e.g., calls per minute, medication errors, completed claims)
4	Results	What is the impact of improved knowledge and skills on the organization?	Business performance indicators, such as cost savings (e.g., reduced travel expenses, reduced administrative costs) quality improvements (e.g., improved satisfaction, reduced cycle time, help-calls reduction), and increased sales (e.g., increased orders, reorders)

Tools for traditional instructional design

A discussion of the development tools that you can use for traditional and rapid instructional design could be a chapter in itself. I'll describe a few of my favorites here, but I don't mean it to be exhaustive. If you are getting started with instructional authoring, a good first step might be to purchase Training Media Review's (http://www.tmreview.com/) newly updated authoring report (full disclosure: I wrote the introduction and write authoring tool reviews for them) and then download trial versions of the ones that seem most promising for your situation and play.

Some of the tools that allow you to build meaningful practice and feedback include Trivantis® Lectora® (http://www.trivantis.com/), KnowledgePlanet™ Firefly® (http://www.knowledgeplanet. com/products/developer.asp), Flashform™ (http://www.rapidintake.com/flashform_index.htm), Captivate™ (http://www.adobe.com/products/captivate/), and TechSmith® Camtasia® (http:// www.techsmith.com/camtasia.asp). I personally love Lectora because it is so full-featured, and also regularly use Captivate to build applications and simple soft-skills simulations.

Tools for rapid instructional design

My main objection to rapid development tools (which has little to do with the tools themselves) is that users want to believe that they are "the answer" for all instructional authoring. Sorry, they aren't. When you need instruction to provide truly meaningful practice you should either blend rapidly-built content with other instructional elements (in person or online) or use more complex tools with more functionality.

Tools that allow you to build and deploy content very quickly by converting PowerPoint slides (with or without narration), such as Articulate Presenter (http://www.articulate.com/), Present-ationPro (http://presentationpro.com/), and Microsoft Producer (http:// www.microsoft.com/ office/powerpoint/producer/prodinfo/default.mspx), work extremely well at the information end of the continuum, and as part of the elements for instruction.

A few other tools that you can use for rapid development and deployment include applications that facilitate online Web or audio conferencing such as Elluminate® (http://www.elluminate.com/), Acrobat® Connect (http://www.adobe.com/products/acrobatconnect/), or GoToMeeting® (https:// www.gotomeeting.com/). Microsoft Word® documents can be "saved as" HTML pages (File>Save as>Web Page) or can be converted to Web pages using a tool like WordtoWeb™ (http://www.solu-tionsoft.com/w2w.htm). Quick interaction-building tools such as Raptivity™ (http://www.raptivity. com/) are also extremely useful, alone or with other tools.

Putting it all together

You may have noticed one specific theme that runs throughout this chapter. Rather than seeing selection of design strategy as either/or propositions, see them as choices made to best meet learner and organizational needs. That is, you can use a combination of instruction and information, class-room, online, and real life, synchronous and asynchronous, and traditional and rapid instructional design to improve training outcomes.

Here is a situation that I hope will show how different design strategies can coexist happily togeth-er to meet learner and organizational needs.

Fairfield Company is an organization that franchises quickie photo shops. They have grown very fast, and are having a hard time training franchisees because the need for training has outstripped their ability to provide it. Franchisees typically came to the home office to learn how to find and build-out a location, how to hire and manage staff, handle financials, and run their shops. The cur-rent level of growth means that Fairfield's training program has franchisees in the home office every

Table 3-12

Design strategies selected for Fairfield's franchisee training process

Design strategy choices	Fairfield's design strategies	Tools and technologies
Instruction	Pre-onsite instruction will assure that franchisees come to the home office having successfully completed the following modules: • Fairfield history • Finding a good location • Franchisee success factors • Photo shop success factors Onsite instruction will include the following topics: • Internet basics (as needed) • Building out your shop • Permits, licenses, and insurance • Selecting and buying merchandise • Use and troubleshooting of equipment • Opening your store • Dealing with customers • Legal aspects of hiring, managing, and training staff • Managing your store • Marketing your store • Store financials Post-onsite instruction will reinforce major points from onsite instruction and help them plan for their opening and beyond. It will include the following topics: • We want you to be successful • Getting local publicity for your store • Hiring staff • Training staff • Making customers happy • Reading and interpreting financial statements Bi-weekly updates on product changes, legal and management aspects, etc. Monthly conference call prior to store opening (in all time zones) for support and Q&A	Pre and post: Print materials with online multiple-choice tests Bi-weekly updates: Articulate Presenter narrated PowerPoint modules with links to download-able print documents as needed Conference call
Information	The franchisee manual, provided during the onsite instruction will include: • Home office staff, phone numbers, and e-mail addresses • Store build-out documents • Insurance documents • Product documentation • Equipment documentation • Human resource documents • Order forms • Training materials used during onsite instruction • Training materials for staff Updates to the manual provided during bi-weekly training modules	Print and downloadable print documents
Classroom	Onsite training is classroom based, with lots of time for in-depth Q&A and ability to talk with successful franchisees	3 simulated stores (real, not electronic)
Online	Pre- and post-onsite instruction to be print based (downloadable PDFs) with online multiple-choice tests Discussion forums will be online	Online multiple-choice tests Online asynchronous discussion forums
Real life	New franchisees will spend 1-3 days working in 1-3 successful stores for the purpose of learning behind-the-sceen ropes and gaining mentors who they can contact after their store opens.	
Asynchronous	Pre- and post-instruction and bi-weekly updates will be asynchronous. Online asynchronous discussion boards will be used for franchisees to ask questions, share success stories, and support each other. This will be monitored by the VP of Franchisee Communications, who will also answer questions and get additional help for franchisees as needed.	Online asynchronous discussion forums
Synchronous	Synchronous conference calls will provide support and help.	Conference call
Traditional instruction design	A traditional instructional design approach will be used for onsite training and for pre- and post-instructional materials.	
Rapid instruction design	A rapid instructional design approach will be used for monthly updates. Conference calls will have an agenda but require no instructional design effort.	

week of the year, and they still aren't able to keep up with the demand. And they have noticed that existing training doesn't have enough impact on franchisees behaviors, once their stores are open.

Fairfield analyzed their situation with the help of a learning consultant and built a training plan, part of which is in Table 3-12 on page 40, which describes how various design strategies will help them meet their training needs.

Some final comments on instructional design

Not long ago, I was openly critical of most instructional authoring tools, preferring instead to use and recommend general Web development tools and programming, because they provided maximum flexibility. In the last few years, instructional authoring tools have become much more full-featured, and I'm no longer advising that instructional designers and others who aren't primarily development geeks use general Web development tools. This is because general Web development tools require too much learning curve for far too little extra gain.

I am still advising that before you purchase any tools, you do an analysis to determine what the tools need to produce. Remember that exercise bike in your basement that has turned into a clothes drying rack? You don't want to replicate that experience with authoring tools, right?

So start with a plan, and match design strategies to the needs of learners and your organization. Just as classroom training is rarely the best answer for all training needs, e-Learning is rarely the answer to all training needs. I'm assuming that you have limited time and money and need to use your time wisely. Rapid design approaches and rapid design tools can help you do just that. And dare I say it? — Many training projects do not merit a ton of effort. But when job skills are critical, and inadequate skills is not an option, use a more rigorous approach. Although I didn't add "performance support" to the mix of design strategy decisions in this chapter, it's a non-training approach to job performance that needs far more use than it gets.

Conclusions

I hope this chapter provided you with some insights about selecting design strategies for online and blended instruction. Here are the most critical conclusions I came to when writing this chapter.
- Select design strategies based on their attributes and their ability to positively impact individual, group, department, and organizational performance.
- Traditional instructional design isn't very *efficient* for getting instruction out quickly. When skills mastery, and evidence of real-life skill, are needed a more rigorous design approach is warranted and should be used.
- Rapid instructional design is much more efficient than traditional instructional design for producing instruction. It is often a good strategy for lower-level instructional objectives, and when there simply is no time for using a traditional instructional design process. It probably should not be the only online learning strategy you use.
- Consider adopting or adapting some of rapid instructional design's approaches to increasing the speed of traditional instructional design.
- Don't make design (or technology) strategy decisions that box you in. New tools and technologies are always around the corner.
- There is no such thing as the "right" authoring tool or the "right" approach. You need different tools and approaches for different purposes.
- You don't need an equal amount of effort for all training projects. "Good enough" is often exactly what's needed. Good enough is often just fine. (And even if it isn't, it has to be, because there are never enough resources to go around.)

• Combine classroom, online, and real life to gain the benefits of each, and to mitigate the challenges of each.

To Learn More

Benjamin S. Bloom, Bertram B. Mesia, and David R. Krathwohl (1964). *Taxonomy of Educational Objectives.* New York. David McKay.

Dick, Q., Carey, L., & Carey, J.O. (2000). *The Systematic Design of Instruction.* Saddle River, NJ: Pearson Allyn & Bacon.

Merrill, D.M. (2002). First Principles of Instruction. *Educational Technology Research & Development* (ETR&D), 50(3), 43-59. Available: http://www.indiana.edu/~tedfrick/aect2002/firstprinciples-bymerrill.pdf

Rossett, A. (1999). *First things fast: A Handbook for performance analysis.* San Francisco: Jossey-Bass/Pfeiffer.

Smith, P. & Ragan, T. (1999). *Instructional Design,* 2e. New York: John Wiley & Sons.

Thiagarajan, S., Tips for Rapid Instructional Design. Online at http://www.thiagi.com/rid.html and article: http://www.thiagi.com/article-rid.html

Tripp, S. D., & Bichelmeyer, B. (1990). Rapid protoyping: An alternative instructional design strategy. *Educational Technology, Research and Development,* 38(1), 31-44.

Van Merriënboer, J. J. G., Clark, R. E., & De Croock, M. B. M. (2002). Blueprints for complex learning: The 4C/ID-model. *Educational Technology, Research and Development,* 50(2), 39-64. Available online http://www.ou.nl/otecresearch/publications/Jeroen%20van%20Merrienboer/Jeroen%20vanMerrienboer%20etrd.pdf

Learning Peaks' resource database: http://del.icio.us/learningpoeaks

Recommended books: http://www.learningpeaks.com/books.html

Texas Engineering Extension Service

Leading training provider accelerates creating content for homeland security curriculum using Adobe® FrameMaker® software, XML, and DITA

Texas Engineering Extension Service

www.teex.com

In Partnership With
Integrated Technologies, Inc.
www.intech.com

Industry
Training and Education Services

Challenges
- Integrate authoring processes with backend systems
- Adopt industry standards such as XML and DITA

Solution
- Single-source publishing

TEEX is using Adobe FrameMaker and a content management system to streamline creation of hundreds of training manuals in accordance with DITA specifications.

Results
- Accelerated creating manuals by as much as 25%
- Reduced costs to update manuals
- Improved quality and consistency of materials
- Enabled effective reuse of content across manuals
- Adopted industry standards to support long-term growth

Systems At A Glance
- Adobe FrameMaker
- Adobe Acrobat® Professional
- Platform: Microsoft® Windows® 2003 Server and PCs running Microsoft Windows XP

Right training, right response

Proper training is crucial when responding to emergency situations. For firefighters, police officers, homeland security agents, and others protecting the public, the Texas Engineering Extension Service (TEEX) offers renowned training and education programs via its Texas headquarters to locations worldwide. Every year, more than 175,000 people participate in TEEX programs, gaining the skills to respond safely and successfully.

With more than 550 programs in areas ranging from homeland security to health and safety, TEEX serves a range of clients in the public and private sectors. At the core of TEEX programs are comprehensive education manuals developed by content specialists and leaders in emergency response, public safety, and other disciplines.

"Our materials include everything from 400-page manuals to quick-reference data sheets," says Trey McCallie, manager of curriculum services at TEEX. "Regardless of the document, we have to know that content is accurate and up-to-date." To build a dynamic document authoring environment, TEEX is using powerful software, including Adobe FrameMaker and a Siberlogic content management system (CMS). The company is also working with solutions provider Integrated Technologies for training and consulting services.

Too many processes and tools

TEEX customers work in highly regulated industries, where changes to protocol can happen every few months. These changes have to be reflected in training materials. With hundreds of courses across business units, the demands on the 60 employees in the Curriculum Development group are intense. To further complicate the process, TEEX had no standard authoring tool, with some staff using Microsoft Word software and others using Adobe FrameMaker.

"It was difficult to implement effective quality control processes across groups, and we couldn't easily leverage work done by each person," explains McCallie. "Our goal was to deploy a system that enabled us to produce higher-quality, more consistent manuals that contained reusable content."

Single-source publishing

In looking for a document authoring tool, TEEX wanted to address several criteria, including support for standards like XML and the Darwin Information Typing Architecture (DITA); reliable handling of long documents; easy integration with a CMS; and the ability to reuse content.

"We needed a single-source publishing model that leveraged XML data in our CMS," says McCallie. "This would make it easier to quickly create customized manuals for clients. And by working in a structured environment, we could improve the quality and consistency of materials."

One tool, multiple advantages

The Curriculum Development group's largest team used Adobe FrameMaker 7.1, as well as newer versions of the software, and was impressed by the application's ability to handle long

With Adobe FrameMaker software, TEEX's Curriculum Development group has an enterprise publishing solution for authoring and delivering highly customized manuals for clients. The Adobe software makes it easy to reuse content across materials and enables the group to leverage standards like XML and DITA for streamlined document creation.
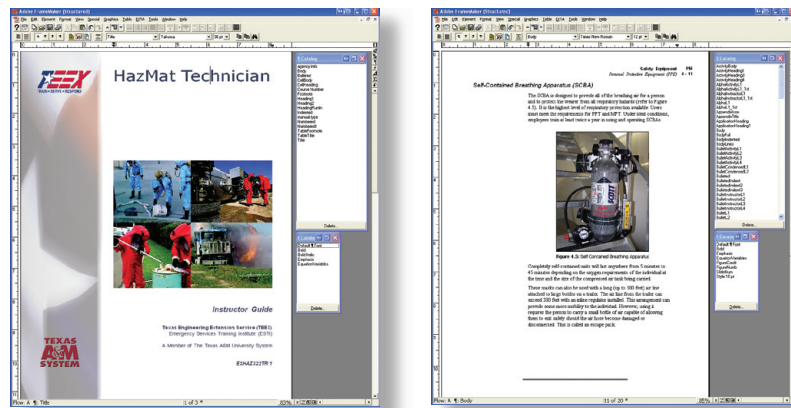
"Adobe FrameMaker mapped nicely to our demands for an enterprise publishing solution. Its ability to manage long documents is outstanding. Plus, its structured environment and support for standards give us the control and access we need."

Trey McCallie,
Curriculum services manager,
TEEX

For More Information
www.adobe.com/products/framemaker/

For OnDemand eSeminars
www.adobe.com/go/techcom_eseminars

documents. "Adobe FrameMaker mapped nicely to our demands for an enterprise publishing solution," explains McCallie. "Its ability to manage long documents is outstanding. Plus, its structured environment and support for standards give us the control and access we need."

By using Adobe FrameMaker, TEEX can provide document type definition (DTD) templates readily accessible to more than 40 curriculum content developers. As a result, the final training manuals have a more professional, polished appearance because how and where content appears is consistent, regardless of the staff that creates them.

"With FrameMaker, we have better control over the layout and overall look of manuals," says McCallie. "There's also a boost in employee productivity because our content specialists are free to focus on writing and editing text, not on learning how to be page-layout experts."

Tremendous efficiency gains

The structured authoring environment delivers the added advantage of enabling TEEX to better leverage XML content in its Siberlogic CMS. For example, blocks of information in XML can be used and reused at the paragraph level, allowing curriculum developers to take frequently used safety processes and guidelines and insert them automatically into the appropriate pages.

"This is a tremendous efficiency gain for our staff," says McCallie. "Now, we can revise and reuse content easily across manuals, and then automatically insert it everywhere it needs to appear. The efficiencies could accelerate creating manuals by as much as 25%."

By adopting FrameMaker and accessing DITA FrameMaker plug-ins from Integrated Technologies, TEEX is taking advantage of document architecture specifications outlined in DITA. "As an XML-based architecture for authoring, producing, and delivering technical information, DITA makes it easier for TEEX to reuse content and then deliver final documents to recipients," says Tom Aldous, president of Integrated Technologies, Inc.

For most TEEX manuals, converting documents to Adobe Portable Document Format (PDF) files for printing is the final step in getting manuals ready for clients. In some cases, teams of TEEX reviewers will use electronic commenting tools in Adobe Acrobat Professional software to add comments to drafts of manuals in PDF.

Because it deals with many consultants, TEEX finds it useful to add security and control to manuals in Adobe PDF. The documents in PDF can be password protected to limit access to materials, and information in files can be locked to prevent recipients from altering underlying content.

A long-term solution

"Using FrameMaker software, we integrated our front-end authoring with our back end systems," says McCallie. "At the same time, we put standards in place that will streamline our work for years to come."

Marketing and Change Management for e-Learning:

Strategies for Engaging Learning, Motivating Managers, and Energizing Organizations

By Lance Dublin

Just over 20 years ago global corporations spent $51B on re-engineering, a management approach that promised significant cost savings and operational efficiencies, a dramatic reduction in time-to-market, and exponentially accelerating profits. (Sounds a good deal like what organizations expect from e-Learning, doesn't it?). "Forget all you know; don't automate, obliterate," was just one of the mantras. Organizational challenges were to "think out of the box" and to leverage technology to do what they had never been able to do before – to not just improve their businesses or make them better, but to transform them.

But, after just five years people seldom mentioned re-engineering. And, if it was mentioned at all, the connations were negative. The term re-engineering had become synonymous with re-structuring and downsizing, lay-offs, and failed programs. More than half of early re-engineering projects failed to be completed, or did not achieve bottom-line business results. How did this happen? What caused re-engineering to, in effect, fail?

Necessary, but not sufficient

The answer, it turned out, was very simple, and captured in one word: people. Organizations could design significantly better business processes and configure technology solutions to support them. Although necessary, they were not sufficient to ensure the success of the re-engineering project. Re-engineering projects failed because the people impacted just didn't want to be "re-engineered;" they did not want this change done to them. The 1994 CSC Index "State of Re-engineering Report" confirmed this when it reported that over 50% of the companies participating in the study reported the most difficult part of re-engineering was dealing with the fear and anxiety in their organization. (*Editor's Note:* CSC Index was a management consulting firm that specialized in business process re-engineering in the 1990's.) In another re-engineering post-mortem benchmarking study with 150 companies over 24 months, lack of effective change management ranked as one of the top five key lessons.

It was Mike Hammer, the re-engineering guru himself who best summarized this critical lesson with the phrase; "The 'soft' stuff is really the 'hard' stuff." And you can now find this phrase repeatedly in article after article and presentation after presentation about the real challenges in implementing any technology-based change.

Contents

In Chapter 2 you will find information about:
- Getting the "Soft Stuff" right
- Change Management: Winning the hearts and minds
- Consumer Marketing: People want to buy, not be sold
- Change Implementation: Awareness, engagement, and commitment

Getting the "Soft Stuff" right

Having great technology, the best content, and sound instructional design is certainly necessary for the success of any e-Learning initiative. But, even taken together, they are not sufficient to ensure success. To ensure success with e-Learning, organizations must get the "soft" stuff right; they must engage learners, motivate managers and energize their organization. (See the quote in Sidebar 4-1.)

Truly successful organizations use a systems-based implementation strategy founded on principles of change management, consumer marketing, and communications. And they follow a detailed change implementation plan – with defined activities, timetables, and resources – based on proven techniques and approaches drawn from these disciplines.

Change Management: Winning the hearts and minds

E-Learning of any type is a change. Even though it may be as simple as replacing an instructor-led class with an online course or an Excel-based spreadsheet with an LMS, it still is a change in the organization. It's a change to employees, to front-line supervisors, to mid-managers, to senior management, and to all the staff in supporting organizations. Employees used to having time away from their desks and their work, and preferring to spend that time with colleagues and instructors, often resent having to learn on their own time and "from a computer." Trainers who feel valued for their platform skills and content knowledge often feel threatened that they will be "replaced" by e-Learning. Managers, who have always controlled the access to training, often feel undermined when their employees can learn any time and from any where. And often the organization as a whole is neither aware of, engaged in, or supportive of the e-Learning initiative – nor even understands why it should be.

It is not organizations that change, however. People change; employees, managers, colleagues, partners, suppliers, customers. And, they change one person at a time. By applying the discipline of change management the chances of success increase dramatically. Change management is the combination of processes, activities, and approaches that manage the people of the organization through the transition from the old way of doing things to the new way, from the old way of training to e-Learning. Change management is about communication and exchange, dialogue and questions, leadership and support. The focus of change management is on attitudes and behaviors and the objective is to win the battle for the "hearts and minds" of the people – all of the people – within the organization.

There already exists a tremendous body of knowledge about change, transitions, and change management. The following three concepts are particularly important to understand.

First is the concept of transitions. William Bridges, noted authority on change and change management said it best, "It isn't the changes that do you in, it's the transitions." According to Bridges there are three stages in the transition process: endings, the neutral zone, and beginnings.

Endings

Applied to e-Learning, replacement of instructor-led training and all that that means is often seen as the "ending." Learners, trainers, and managers are inclined to try to hold

---

on to the "old-ways." But, by applying change management techniques they can begin to let go of this past, and have the confidence and support to at least move into their "neutral zone." They might not yet be "gung-ho" but at least they are willing to give it a try. And, most importantly, it will set the stage for positive new beginnings that e-Learning can represent for them and the organization.

The neutral zone

Second is the concept of change as a "journey" from one place to another, as opposed to a series of events. Psychologists Dennis Jaffe, Cynthia Scott, and Glenn Tobe developed an excellent model for this based on their work and the work of noted psychiatrist, Elisabeth Kubler-Ross. Learners making the transition to e-Learning find themselves going through a four-phase change journey; Phase 1 – Denial; Phase 2 – Resistance; Phase 3 – Exploration; and Phase 4 – Commitment. A well designed change-implementation strategy ensures all the people in the organization are supported through the early phases of denial and resistance, so their frustrations and discomfort with the "new way" don't overwhelm them. It enables them to then explore what e-Learning can offer them that is positive and, over time, ensures they will become as committed to e-Learning as they have been with any other change in their lives.

Beginnings

The third concept is leverage. It is impossible to have one-on-one conversations with all of the people impacted by an e-Learning initiative. So, who are the right people to focus on, and how many really need attention? Everett M. Rogers laid the groundwork in this area with his landmark "diffusion of innovation theory." He determined that people, when confronted with a new innovation (i.e., change), fall into six distinct groups – innovators, early adopters, early majority, late majority, late adopters, and laggards – in a bell-shaped dispersion pattern. The group having the greatest influence and providing the most leverage for ensuring the success of the change long-term is the early adopters. Although they represent only 20% of the total they represent what author Malcolm Gladwell termed, "the tipping point." They are the respected opinion leaders in an organization who adopt new ideas early but carefully. And so once they accept the change, the significantly larger groups of the early and late majority will eventually follow.

Consumer marketing: People want to buy, not be sold

Another discipline that is important to apply to ensuring the success of any e-Learning initiative is consumer marketing. The goal of consumer marketing is quite simple: attract and retain customers. And, at its best, it builds mutually satisfying long-term relationships. In recent years, researchers have established that brand and positioning are the critical components of a consumer marketing program.

Technically, a brand is the "combination of symbols, words, or designs that differentiate one company's product from another company's product." But, branding is not just about aesthetics. Branding is about guiding perceptions and answering the question, "Why should I do business with you?"

Why is branding important in e-Learning? Branding is what initially engages learners and then keeps them coming back. It's what re-assures managers and excites the organization. Bottom-line, it succinctly communicates the value of e-Learning to create learner preference, generate management support, and ensure organizational commitment. Branding typically includes a unique logo, fonts, and color palette as well as a tag-line. The logo, with its unique font and colors, is the memorable image that represents the e-Learning program or initiative. And the tag-line is the short phrase that captures the essence of it. These are some excellent examples of the power of branding in e-Learning:

Four Seasons Hotels and Resorts uses "***e-Knowledge Suite***" as the brand for their e-Learning portal. Their tag-line is "*Check in 24/7; Check out A Unique Learning Experience.*" Four Seasons' colors, fonts, and graphics are used throughout the portal site, and within each e-Learning course.

John Muir Health brands their e-Learning portal the "***Learning Point***" with the tag-line, "*The Go-To Place.*" They have developed a distinctive look and feel around a custom logo and color palette that appears on the portal site and within each e-Learning course.

Sheetz Corporation brands their e-Learning portal, "***Z-Force***" with the tag-line, "*Empowering the People of Sheetz Through Learning.*" They also have developed a distinctive look and feel around a custom logo and color palette that appears on the portal site and within each e-Learning course.

The standard marketing adage is that acquiring new customers is much more expensive and less profitable then keeping repeat customers. This is also true of e-Learning. Organizations want learners to not just come back to access courses as-needed, but to feel they are in a relationship with the overall e-Learning initiative. They want e-Learning to engender the loyalty that is often the case with Google, e-Bay, or Amazon.com. For e-Learning, building this type of relationship can start with things as easy as single password sign-on, personalized reporting options just for learners and managers, and proactive e-mail announcements of new offerings in subject areas recently accessed.

Change implementation: Awareness, engagement, and commitment

To ensure the success of any e-Learning initiative, all of the people impacted must be informed and aware, and involved and engaged. And, the organization as whole must be committed to its ongoing success through full integration into jobs, work, and business processes. Change implementation is a process-based, inclusive, and always two-way approach which draws upon both change management and consumer marketing principles and practices. It focuses not only on ensuring that individuals think and act differently, but also on the development and reinforcement of the necessary new individual and organizational attitudes and behaviors.

The I3 Change Implementation model (Figure 4-1) consists of three phases which form a never-ending cycle:
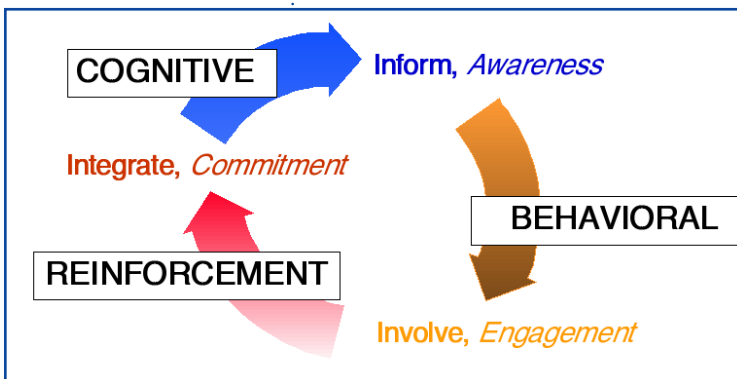
Figure 4-1
Change Implementation Model. Copyright Lance Dublin, 2003-2007

Phase 1. Inform – Generate awareness

Through information and messaging activities, (i.e., marketing communications or "marcom" as it's known), employees, managers, and the entire organization are given simple and clear answers to the "what, why, how, who, and when" questions. And, most importantly, in this phase you begin to address the answer to the "what's in it for me" question as well. Communicating the brand (i.e., logo, colors, fonts, palette, and tag-line) begins, and is repeated and repeated and repeated. The goal of this phase is to make sure the messages the organization wants heard are heard, and are heard in ways they will be recognized, recalled, and remembered. Examples of specific activities during this phase might include: newsletters, presentations, e-mails, Webcasts, voicemails, documents, and speeches.

Phase 2. Involve – Generate involvement

Just giving all the individuals in the organization who are impacted by and involved with e-Learning answers to "what, where, when, why, who, and how" questions though is not enough. In order for

e-Learning to be successful there must be a change in their attitudes and behaviors. Attitude and behavior change seldom happens based solely on the passive receipt of information, a cool logo and tag-line, exciting colors and graphics, or information and give-aways. The key to this type of change is engaging everyone, while paying particular attention to the important influencers within the organization, the 20% of the people that represent the "tipping point." Organizations must provide a first-hand experience of e-Learning to give learners and managers and even executives the opportunity to take it for a "test-drive," ask questions, and form their own opinions. The goal of this phase is to have them internalize and personalize the benefits of e-Learning so that it becomes theirs, not just the organizations. Specific activities during this phase might include: videos, department meetings, lunch-room fairs, hall-way expos, and traveling "road-shows."

Phase 3. Integrate – Generate commitment

The long-term success of an organization's e-Learning efforts though is dependent upon more than just great marketing and communications. It requires that e-Learning becomes a recognized part of the organization's culture, fully integrated into the work-life of all of the employees, supervisors, managers and executives. In this stage you identify and target for involvement the ongoing organizational processes and systems – as well as any critical business initiatives e-Learning can support and enable. The purpose is to ensure that e-Learning becomes well accepted as the "norm," critical to the success of individuals as well as the organization as a whole, and recognized as the platform-of-choice for ongoing learning and development as well as the enablement of business processes. Specific activities during this phase might include: integration with the performance management process, supporting a new key-business initiative, and launching and tracking all leadership development and management training.

Conclusion

Across all industries, organizations that are successful with e-Learning have in common an understanding that having the right content, the right design, and the right technology is just not enough. Certainly it's necessary for success, but it is not sufficient to ensure success. To ensure their success these organizations pay as much – or even more – attention to engaging learners, motivating managers, and energizing their organizations. They understand that this "soft" stuff is the "hard" stuff. They take it seriously. They plan for it. They spend time and money on it. They work at it. They are diligent about it. They are committed to it. And, they do this because they understand that, bottom-line, this "soft" stuff is the critical ingredient for ensuring their e-Learning success.

Grundfos Management A/S

Leading manufacturer streamlines training and delivers compelling eLearning courses to customers and employees worldwide using Adobe® Connect™

Grundfos Management A/S
www.grundfos.com

GRUNDFOS

In Partnership With
ZaqONE
www.zaqsolutions.dk

Industry
Manufacturing

Challenges
• Accelerate production of training materials
• Reduce costs to deliver training to staff, partners, and customers worldwide
• Minimize need for IT to support eLearning courses

Solution
• eLearning
  Grundfos is using Adobe Connect to deliver engaging training courses to staff, partners, and customers worldwide.

Results
• Enhance quality and accessibility of training courses delivered worldwide
• Help ensure that staff, partners, and customers have continued access to timely product information
• Reduce time and costs to produce and deliver training content
• Minimize demand on valuable IT resources needed to support training initiatives

Systems At A Glance
• Adobe Connect
• Adobe Presenter
• Adobe Acrobat® Connect™ Professional

Training customers and staff worldwide

Grundfos is the world's largest manufacturer of circulation pumps. The company has offices in 58 countries and currently employs approximately 14,000 staff, with roughly a third employed in Denmark. With its large employee base and complex products, Grundfos has its own training academy that today is being supplemented with Adobe Connect software.

eLearning is crucial for Grundfos to meet the challenges of the future and to reinforce its position as the leading company in the pump industry. Both employees and customers can be educated with the help of Adobe Connect.

For Grundfos, a commitment to staff training helps ensure the company can maintain and develop its position in the world market. This is the reason why Grundfos established its training academy— the Poul Due Jensen Academy—with associated hotel facilities at its headquarters. The academy is an independent division of Grundfos Management and is managed by Kim Hansen, the director of the academy.

Be-Think-Innovate

The overall objective of the academy is to ensure the best education for employees. For example, sales managers should understand as much about sales and marketing as they do about product features. Also, instead of just responding to customer inquiries, the sales staff should be proactive in its relationships with existing and potential customers, serving as problem solvers and reliable partners that can deliver customized solutions. This requires highly specialized knowledge that can only be acquired through excellent training.

"Be-Think-Innovate" is the slogan that Grundfos employs to put the company's values into words. Being willing to change, to assume responsibility, and being innovative are crucial for meeting the challenges of the future. One initiative that was developed in this spirit is using eLearning to attain even closer contact with the company's customers. For instance, dealers and wholesalers make decisions every day as to which pump they will recommend for a project. Specific product knowledge builds confidence with the customer. Therefore, Grundfos wants to offer product training via eLearning to ensure that customers can choose the right Grundfos pump.

Leveraging the reach of the web

Senior eLearning Project Manager Ole Kristensen is tasked with developing training methods that utilize the Internet for updating the knowledge of Grundfos employees. With eLearning, the time and costs for training employees are reduced compared to traditional training methods. At the same time, eLearning can happen at each employee's location.

For Grundfos, eLearning is not an alternative to traditional courses, but instead supplements courses as part of a blended-learning process that combines day courses and eLearning. "eLearning and day
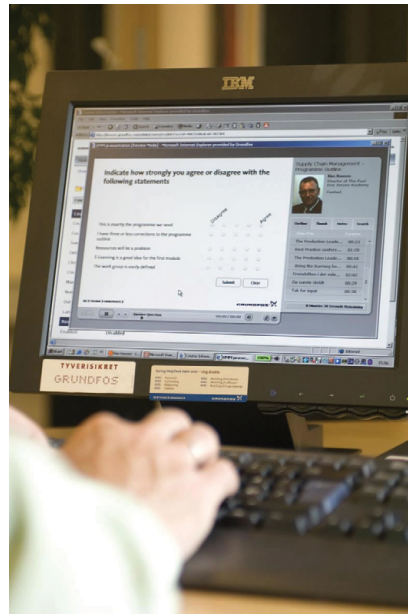
"Thanks to Adobe Connect, we can train our employees worldwide faster and more cost effectively than ever."

Kim Hansen,
Academy director,
Grundfos

courses are part of our module-based training system," explains Kristensen. "It gives participants the opportunity for better preparation and offers flexibility as the eLearning modules can fit into people's busy lives. We have also established a system to handle customer training."

Adopting Adobe Connect

Grundfos uses Adobe Presenter and Microsoft PowerPoint to create eLearning content. Because Adobe Presenter and PowerPoint are integrated, anyone who can use PowerPoint can create eLearning presentations with animations and built-in tests. An Adobe Connect presentation can also be used to create short training exercises or product presentations that conclude with a few questions that test whether the participant has understood the content.

Another advantage of using Adobe Connect is that the presentation is delivered in the Adobe Flash® format. This means that all PCs can run the presentation without the need to install extra software. As a result, Grundfos does not need to devote a lot of time to providing support. "By using Adobe Connect and Adobe Flash, we are confident that people can participate in trainings without problems," says Kristensen. "Users only have to click with the mouse to run the presentation. At the same time, the minimal bandwidth required for the Flash based trainings is amazing. We can even reliably train people who have low-bandwidth connections in remote areas worldwide via Adobe Connect."

Rapid training and quality meetings

With Adobe Connect, Grundfos can quickly produce learning material. Traditionally, production of eLearning material has been expensive and time-consuming. "With Adobe Connect, we can rapidly create and assemble a complete training presentation in less than three hours—previously it could take three weeks just for the planning and storyboard," explains Kristensen. "We can now train our staff worldwide on a given topic within 24 hours. This is truly rapid learning," adds Hansen, "Thanks to Adobe Connect, we can train our employees worldwide faster and more cost effectively than ever."

Grundfos runs Adobe Connect on an internal server. Authorized employees have an area in which they can see which courses they should take, and also view the results of courses they have completed. It was important for Grundfos that Adobe Connect can handle user data from its internal directory server. This means that users do not have to be set up separately on the Adobe Connect server. The Adobe software has built-in LDAP integration and automatically accesses all user data from the Grundfos directory database. In this way, it is possible to maintain users from one location, and as many as 6,000 users can be set up in less than hour.

For More Information
www.adobe.com/products/connect/

With a hosted Adobe Connect module for training, Grundfos offers training to customers and partners. The Adobe solution monitors who has gone through the training presentation and uses short tests to measure whether the messages have been understood. With Adobe Connect, the company can quickly update customers with the latest product information. "Adobe Connect enables us to deliver timely product training to our distributors and wholesalers, so they can always recommend the right pump for a project," says Hansen. "We'd like to train 10,000 customers using the Adobe software, which would give a real upswing in pump sales."

Grundfos also uses a hosted version of Adobe Acrobat Connect Professional for meetings to organize eMeetings. The Adobe meetings do not require an AV room, and can be carried out from an individual's workspace over the Internet (IP). It requires just a web camera and a microphone. Through live meetings, the course participants have the opportunity to take part actively in training programs, asking questions and sharing their knowledge with the other participants. In addition to live course meetings, Grundfos uses Acrobat Connect Professional for normal business meetings.

A complete learning solution
At Grundfos, eLearning is an important part of the company's training strategy. Adobe Connect provides the opportunity to manage the entire eLearning flow, from production and design of learning content that includes integrated tests through to following up and monitoring activities. Grundfos can see the test results of individual users and assess whether eLearning is working. Everything is controlled from the Adobe Connect server.

The Adobe software also offers the possibility for live training via the Internet. The software is so user-friendly that production of the training process is assigned to the individual departments. In this way, eLearning can gain acceptance as a natural tool for knowledge dissemination and competence development at Grundfos.

Top-Level Elements for a Successful e-Learning Strategy

By Lisa D. Young

"Cheaper, faster, better …"
… a familiar mantra many organizations look to live by when it comes to training and development. But in today's reality of scaled-back training departments, diminishing budgets, dispersed workforces, and changing content it is often difficult to live up to.

Many see e-Learning as a way to make this mantra a reality, and organizations have jumped on the bandwagon. E-Learning is progressive, it is sexy, and it can be rapidly developed and implemented, creating a perception that it is the catch-all solution to training and learning needs. The result is that many organizations expend more effort on churning out e-Learning courses than on developing a long-term strategy that will result in successful e-Learning.

E-Learning is here to stay. Technological advances and mainstream acceptance of the training methodology only support this notion. Therefore it is time to step back, reevaluate the place of e-Learning in our organizations, and focus on a strategy to support the conception, design, and development of successful e-Learning initiatives and programs. E-learning that is robust, innovative, and timely. E-Learning that pushes organizational boundaries and takes learning and knowledge development to the next level.

A solid strategy can assist in adding value to your program while lowering the stress levels of those individuals who are typically responsible for e-Learning. An increased interest in and acceptance of e-Learning as a viable training solution allows you to enable various non-traditional resources in your organization to be involved in the design and development of e-Learning in a variety of capacities. But be warned: this type of strategy requires letting go of some of the control you may be accustomed to, and slowing putting the design of learning back into the hands of the content experts. It is contingent upon you providing a toolbox and roadmap that sets these individuals up for success.

The five elements of a successful strategy

A successful e-Learning strategy relies on the interconnectedness of five main elements – Tools, Training, Processes, Supports, and People – to provide the knowledge, skills, tools, and support required to create an increased number of e-Learning initiatives that meet the high-standards expected by your organization. These elements are the e-Learning strategy mantra *you* should live by. Grounded in the resources and processes required to efficiently and effectively support the

Contents

In Chapter 5 you will find information about:

entire project life-cycle, your initiatives will produce more e-Learning, in less time, for less money, and will impact a larger audience base.

An understanding of the effect of these elements (see Table 5-1), combined with a holistic understanding of the place of e-Learning within your organization, will ensure that you create a strategy that best suits your current needs, and is flexible enough to support the changing needs of your organization over time. When these elements form the foundation of the larger organizational e-Learning landscape, and are recognized and utilized by all individuals that touch e-Learning, you are on the road to a successful e-Learning program. Let's examine these elements in more detail so you can start to envision the role they can play in your organization's e-Learning strategy.

Tools

Tools are the technological resources you will use to conceptualize, design, and develop your e-Learning initiatives.

As organizations grow, learning departments may not have the headcount to meet the demand for e-Learning course development – the demand for e-Learning outweighs the availability of those individuals traditionally used to design and develop e-Learning initiatives. Dedicated e-Learning resources are often limited to an instructional designer, a developer, a project manager, and an implementation specialist – if you're lucky! As a result, to take e-Learning to the next level, you need to start relying on other individuals to conceptualize, design, and develop e-Learning initiatives. The first strategy element you require to make this happen is the provision of the appropriate tools that support e-Learning – both to create your e-Learning initiatives and to implement e-Learning at an organizational level.

What do these tools look like? Many will be familiar to you – perhaps you already use one in your organization. The key is your understanding of how these tools can work together to help streamline each phase of the e-Learning project life-cycle. It involves knowing how the use of these tools will change over time, and knowing the new tools that will be required as e-Learning grows and matures within your organization.

LMS

Your LMS (Learning Management System) plays a key role in the success of your e-Learning projects. Even the most well-designed and executed course will have limited effect if it is not effectively managed and delivered to the learner. The size and forecasted growth of your organization, and how it uses e-Learning for training and development, will dictate the type of LMS you need to consider. In addition to the commercial packages on the market, free and open-source solutions are also available. (See Sidebar 5-1 on page 55.) There are even companies that offer hosted LMS solutions. Make sure to review the features, functionality, and cost of the various options of the market; as well as your ability to refine and customize the solution to meet your organizational needs. The eLearning Guild has numerous e-Books on the selection, implementation, and management of your LMS that can help you with your decision. Taking the time up front to review

Table 5-1

The benefits of the five elements when used as part of your e-Learning strategy

Benefit category	Increase ↑	Decrease ↓
Cost	ROI	Amount spent on outsourcing
Efficiency	Number of courses developed	Length of time to complete an e-Learning project
Resources	Number of people involved in e-Learning projects at various levels	Reliance on external vendors
Impact	Number of people trained in your organization	Delivery of projects that have errors, are inconsistent, or are ineffective

your options, and involving additional stakeholders in the decision-making process, will ensure you are choosing the best option to support your strategy.

E-Authoring tools

There are many e-Authoring tools available depending on the skill level you expect your resources to have, the type of control over look, feel, and layout of an e-Learning initiative you want individuals to have, and how effectively you want the course to integrate with the tool you will use to manage and host your courses. (See Sidebar 5-2.) Remember the goal is to eventually transition parts of the design and development process to resources that may not be highly technical. Therefore the tools you implement should take this into consideration.

Tools that rapidly develop courses, like Lectora® Publisher™ and ReadyGo®, are great tools for the development of e-Learning by subject matter experts who are not trained in the design or development of e-Learning. The programs are straightforward to learn, and often have a user interface that emulates menus and tools from software packages that are familiar to most individuals (for example, Microsoft® PowerPoint® and Word®). But the strengths of these tools are also their biggest weakness: there are limits to the complexity, layout elements, and functionality of the courses you can produce. Your strategy should take this into account – depending on how you want to grow e-Learning in your organization you need to have a plan for the tools you will require for your people resources as their knowledge and abilities evolve beyond the rapid development tool.

To address this potential barrier, and in response to the abilities of the individuals who will be involved in e-Learning projects in your organization, you may decide to by-pass rapid development and consider a WYSIWYG (What You See Is What You Get) authoring tool, such as SumTotal® ToolBook® or SuddenlySmart® SmartBuilder™. These tools provide more control over the elements, behaviors, and structure when developing your course. When choosing your tool be aware of how published courses behave, how they work with the learner's system, and how it can be integrated and managed within the organization.

Regardless of which tool(s) you end up choosing, make sure you take adequate time to assess your options and determine the best tool for your needs, your users, and your organization. You will find many resources available online that compare various authoring tools, or provide an in-depth analysis of the capabilities of the tool. The eLearning Guild also has many resources, articles, and reports discussing the merits of various authoring tools. Use the research completed by others to your advantage. Bringing a new authoring tool into your organization if your first tool does not work out is a recipe for disaster. The only time you should bring in a second (or even third) tool is to help expand and advance the skills of your resources. Get informed, and get it right the first time.

Additional e-Learning tools

When creating your e-Learning toolbox, make sure to look beyond the traditional authoring tools and review the potential of other software packages that can enhance your e-Learning initiatives. You may want to consider a synchronous

e-Learning tool, such as WebEx®, Microsoft® LiveMeeting®, Elluminate Live!®, or Adobe® Acrobat® Connect Professional™, where individuals can interact in real time in an online virtual space. (See Sidebar 5-3.) This interaction can be text-, audio-, or video-based. Or you may be interested in a tool that also offers additional features, such as asynchronous discourse, document sharing, and collaborative whiteboards (for example, WebBoard™ or Blackboard®). These virtual classroom-like environments create collaborative spaces to develop and sustain learning communities over time, as well as for a specific e-Learning event.

Remember though: with any tool that you bring into your organization you need to ensure the people using these tools know how to leverage this technology effectively. This is where training, the second strategy element, can help.

Training

Training refers to the learning and knowledge opportunities provided to address the needs of various individuals involved in the e-Learning product life cycle.

When developing your e-Learning strategy you will focus on the training needs and requirements of the audiences you want to reach to create a successful, holistic solution. But your strategy will be severely limited if it fails to also consider the different knowledge needs of the resources who will be involved in creating your e-Learning initiatives. For some individuals, this may consist of an overview of what e-Learning is and how it can enhance and benefit training initiatives they require for their teams or departments. For others, it may be the more advanced authoring skills they require to scaffold their current design and development knowledge. By addressing the training needs of this diverse group you provide them with the ability to become increasingly self-sufficient during the e-Learning project life cycle.

There are many ways to approach the training of these resources. Just as you would for any training initiative, you need to ensure that the training methodologies you decide to use best fit the content, context, and audience needs. The following are some of the options you may wish to consider to include in your strategy.

Certification programs

Certification programs are important for providing the foundational knowledge required to equip your resource people with the e-Learning language and processes of your organization. By formalizing the knowledge and behavior expectations coming out of this training you are establishing the importance of the effective execution of your strategy.

Since your resource people will not all require the same amount and type of knowledge, you should provide modular training with content in each unit that scaffolds the content in the others. If you are working with multiple tools in your organization, you can provide basic modules that are prerequisites to completing the tool training. Allow individuals to take the tool modules in parallel, as they are distinct learning paths. Although your people should complete modules in order, it should not be necessary to complete them back-to-back. As your resource individuals grow in skill and develop their proficiency, they can take the next module in the series that helps them advance their skills and abilities. (See Table 5-2 on page 57.)

Table 5-2

Sample certification training program

Program	Module 1: e-Learning Basics	Module 2: Introduction to ToolBook	Module 3: ToolBook for the Advanced User
Focus	Basic e-Learning principles	Basic understanding of the ToolBook authoring tool and its functionality	Advanced ToolBook elements, including triggers and developing interactivity
Why take the course?	Individuals will learn the various phases and deliverables for executing an e-Learning initiative	Individuals learn how to use ToolBook in the creation of simple courses with limited interactivity	Authors are able to create courses with complex interactions and activities.
Audience	Anyone who touches a phase of e-Learning, or supports those involved with e-Learning, e.g. Managers, Directors, Product Specialists, etc.	Individuals who will be designing and developing courses and need to be provisioned with ToolBook	Individuals who have taken *Introduction to ToolBook* and require advanced knowledge and skills for designing more advanced courses

Reinforcement and sustainment

The training of your resources will fall short unless you include training in your strategy that reinforces learning and provides additional knowledge in areas that complement or advance individual skills and abilities. The needs of your resources will change over time, and the certification program won't be able to meet all of these needs. Therefore you need to provide training in small, bite-sized learning chunks, minimizing the time and resources required to support these types of training initiatives. (See Sidebar 5-4.) It is also an opportunity to showcase the various e-Learning tools or prospective tools in your organization.

You should also consider using this type of training to target individuals that you feel would benefit from understanding what e-Learning is and how e-Learning can be used, but are resistant to committing the amount of time required to complete a module in the certificate program. For example, provide a Lunch and Learn session for the facilitators in your organization to help them understand how blending instructor-led training with e-Learning can create a more robust training solution. Use this training to help change mindsets and gain buy-in to the supports and processes, the third and fourth strategy elements, which individuals should be using and following when involved with e-learning projects.

Supports

Supports are the ongoing resources and communication you will provide to individuals involved in the various phases of the e-Learning life cycle.

The success of your e-Learning strategy is a direct reflection of the support you provide in various phases of the e-Learning life-cycle. Support is required to ensure that individuals have the knowledge and mechanisms they require when involved in e-Learning initiatives. These supports allow individuals to reference processes and procedures, review examples, access templates, and get regular updates on the information they need to execute e-Learning effectively. In order to promote the daily use and reference of these supports it is important that they are accessible in a consistent location (for example, through the organizational Intranet), and provided in a consistent manner (a professional look, feel, and branding), creating a "one-stop-shop" for e-Learning information needs. Remember this knowledge repository will need to continually grow and change to accommodate the needs of the various individuals involved in your e-Learning projects. Be prepared to update the site on a regular basis, utilizing feedback provided by the

Sidebar 5-4

Supplementary training types

- Lunch and Learn sessions
- Webinar or Webcast (run live, then archive for future reference)
- E-Learning module using your in-house authoring tool
- Simulations or case studies
- Demonstrations of new technology, new ways of thinking about designing interactions, etc.
- Showcases of e-Learning courses individuals have developed for the organization (can be housed in an online space, or set up as a mini-conference)
- Knowledge or application assessments (e.g. provide individuals with an example of an interaction that needs to be built using your authoring tool and have them provide their method for creating this interaction – can provide prizes for the most accurate method and/or the most creative interaction)
- Mentoring and coaching opportunities

individuals who regularly use the site, and are most familiar with the site's functionality and content. They are in the best position to provide feedback that will enhance how they interact and use the provided information.

Standards and best practice

Providing standards around the design and development of your e-Learning initiatives will ensure you are using best practices to create learning that balances content with interactivity, provides a strong brand image, and makes your e-Learning recognizable within the organization. You should document and interweave these standards throughout the certification training program to ensure understanding and compliance.

Templates

To assist individuals in complying with the organization's standards and best practices, it is important to provide templates that can streamline the design and development process, allowing e-Learning to be created more efficiently. Your templates should be there to support individuals who are new to designing e-Learning, but not hinder those who have more advanced skills and abilities – therefore the use of the templates should be flexible based on ability.

Image library

Your image library is a key support for helping create the brand image you want to deliver in your e-Learning. Remember, you should provide detailed standards around the use of images, including resolution, placement, and acceptable uses.

Interaction gallery (reusable learning objects)

As you start to increase the amount of e-Learning you are producing you can create a library of the best interactions that individuals can customize and use in their own e-Learning development. This gallery of interactions and reusable learning objects, or widgets

Figure 5-1
An example of a weekly communication newsletter sent out via e-mail. Individuals can click on the links provided to learn more about each story.

as some call them, can enhance e-Learning initiatives quickly, freeing up time to develop new interactions and activities. Once again, provide detailed standards and instructions around when to use these interactions, how to use them, and the specifics for customizing them to meet each initiative's needs.

In order to keep these supports up to date and relevant, you must ensure you have a strong communication link with your resources to provide updates of tools, supports, and resources. Providing a weekly or bi-weekly newsletter can help to raise awareness, keep standards and best practices front-of-mind, and ensure correct messages are getting across and being implemented in a time-sensitive manner. (See Figure 5-1.)

Processes

Processes are the methods and procedures used to execute a successful e-Learning project life cycle.

Implementing a successful e-Learning initiative begins with the provision of a strong methodology that supports how the initiative is designed, developed, and delivered. You need to clearly communi-

cate this methodology so that all stakeholders who touch an e-Learning project understand, and adopt it – it is an opportunity to reinforce best practices and highlight roles and responsibilities.

E-Learning project lifecycle

You should design a generic workback schedule that includes all required deliverables, touchpoints, and stakeholder sign-off for each phase of the project lifecycle. It should also include standardized timing for creating the various deliverables, reviewing the deliverables, and providing feedback. For each initiative you should fine-tune the workback schedule with the key stakeholders to suit the specific needs of the project and the resources involved in executing the project.

Regardless of the skill-level of the individuals designing and developing your e-Learning initiatives, there are certain points in the workback schedule where your dedicated e-Learning team members (or e-Team) should always be involved to ensure consistency, compliance, and provide coaching. (See Sidebar 5-5.)

Rapid content development

For client groups that are not ready to make the full leap into the e-Learning arena, you can bridge the gap between content and course design by providing a development template that individuals can populate with the required content. For individuals who understand e-Learning, but are not confident enough to use one of the various development tools, you can provide the opportunity to make layout and interaction suggestions. In addition, they can supply potential links and images to leverage for use in development of the course. After completing this template, the e-Team resource can review the content, map the instructional design ideas to the content, and develop the course using the method or authoring tool of choice. This method will allow you to cut down on the time required by the e-Team to acquire

---

Sidebar 5-5

Phases and deliverables to consider for the project lifecycle and workback schedule

Identify Need

- Provide a training request form that needs to be completed by individuals interested in a training initiative for a specific audience.
- The e-Team should partner to review the viability of e-Learning as a training solution for the request.
- A response to the request should be provided to the stakeholder within a set amount of working days.

Needs Assessment

- Use standardized forms to gather key pieces of information that you require to deliver your course, including the date by which you would ideally deliver the course, the audience, assessment requirements, etc.
- Interview key stakeholders and complete focus groups with individuals that can provide a representative idea of the training needs of the audience.
- Use a standardized form to report on the results of the needs assessment, including key themes, challenges, and barriers. Provide recommendations for the design of the e-Learning initiative. This form should be signed off by stakeholder(s).
- The e-Team should always be involved in this phase of the project in order to directly share their knowledge and expertise.

Design

- Create key design deliverables including course outline, instructional design plan and/or script, storyboards, etc.
- Stakeholder(s) should review the required deliverables, and key stakeholder should provide sign-off before proceeding with the next deliverable in the project workflow.
- The e-Team should always be part of the stakeholder team that reviews the design deliverables.

Development and Testing

- Develop the course using designated development tool or method.
- Complete thorough review and testing of the course to validate content, functionality, compatibility, ability to integrate effectively, and alignment with brand and standards. Proof all courses for accuracy. Involve stakeholders where appropriate.
- If using authoring tools, you may require that courses are published at multiple intervals during development process to ensure compatibility with a LMS – this will help identify any bugs before development proceeds too far.
- The e-Team should always be part of the stakeholder team that reviews the development deliverables.

Delivery

- Provide specific timing for how far in advance a final version of the course needs to be provided before launch.
- Provide process for uploading course into LMS, if required.

Revisions and Maintenance

- Provide a strategy and process for ensuring revision and updating of courses on a timely basis. It should be clear who will be involved in regular reviews, and who will be responsible for updating the course with any changes

---

Typical client group self-reliance phases

Phase 1: E-Learning team designs and develops courses

An individual on the e-Team takes e-Learning initiatives in this phase through the entire project life-cycle. The initiatives may be part of a larger project and not initiated by a specific client group. However, in the instances where the training request is from a specific client group, you should coach and mentor individuals from that client group in order to move them into Phase 2.

Phase 2: Partnership with client group

A subject matter expert on the client group's team takes these courses through the initial design phases. The SME can provide content and ideas for the course development, perhaps using the rapid content development template! A member of the e-Team will then use the template to develop the course.

Phase 3: Self-sufficient client group

Self-sufficient client groups have invested a considerable amount of time and effort to provide their team members with the knowledge and skills required to produce their own e-Learning initiatives. They have multiple individuals that have taken various modules in your certification training program, from developers to directors. These client groups are able to conceptualize, design, and develop all their e-Learning initiatives. The e-Team should still assist in the customization of the workback schedule and review major milestones in the project lifecycle, providing feedback and coaching if required. But ultimately these groups are self-reliant.

Figure 5-2
Example of the long-term strategy for developing the increasing self-reliance of your organization when developing e-Learning initiatives.

content and solicit feedback by allowing resources in the client groups, who make up the fifth strategy element, to have increased responsibility in the rollout of their e-Learning initiatives.

People

"People" refers to the various individuals involved in the design and development of e-Learning initiatives.

When you have the tools, training, supports, and processes put into place to support the design and development of e-Learning initiatives in your organization, you will find that you do not require a large team dedicated to e-Learning. You can have a greater impact leveraging the existing skills, knowledge, and enthusiasm of your dedicated resources to help coach, develop, and mentor other individuals involved in the e-Learning project life-cycle.

As your internal client groups increase their requests for e-Learning initiatives, they increase their willingness to invest and develop the e-Learning knowledge and skills of their team members. Your goal should be to leverage this willingness and move these client groups through the various phases of expertise so they are able to take on increased responsibility for the design and development of their own e-Learning initiatives. (See Sidebar 5-6.) You should be continually assessing your client groups to determine if they require complete support or various levels of partial support during the design and development of e-Learning initiatives.

For many organizations, this may be a new way of thinking about the design of e-Learning. Therefore it is important that you support the mindset change required by individuals and gain their buy-in to this new approach. Communication of your direction is paramount, including your strategy for increasing the number of client groups in Phase 3. (See Figure 5-2.)

On your marks, get set, GO!

What are you waiting for? You understand your organization, you recognize the role of e-Learning, and you now know the elements you require to build an inclusive strategy that maximizes knowledge and resources, and improves the impact of your e-Learning initiatives. Take the elements provided and leverage them to develop a strategy that best fits your organizational needs. All you need to do now is make it happen.
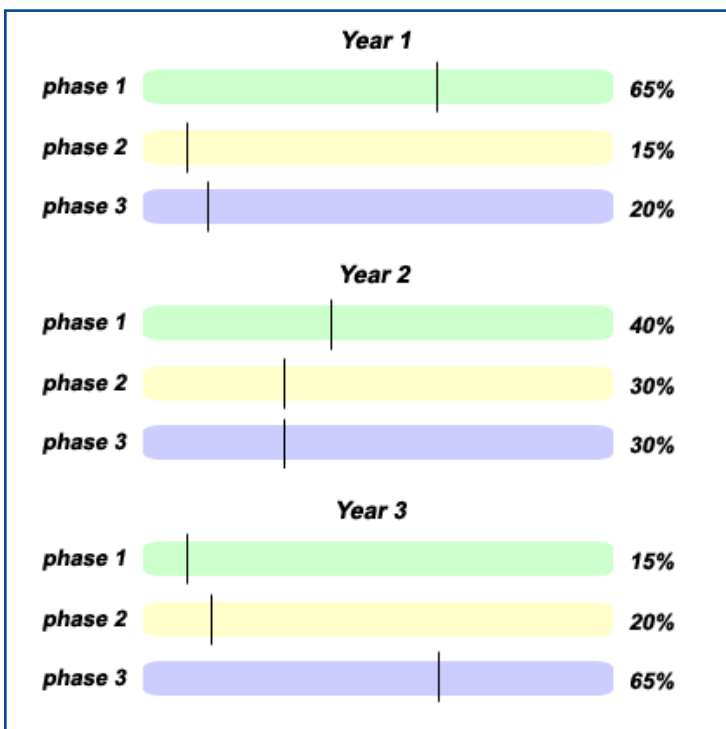
WebAssist

Market-leading developer of Adobe® software extensions relies on Adobe Captivate™ 3 and Adobe Acrobat® Connect™ Professional software to create engaging eLearning experiences

WebAssist

www.webassist.com

WEB**ASSIST**

Industry
Technology

Challenges
• Create interactive product demonstrations
• Provide easy-to-follow, customizable tutorials for company's latest product rollout

Solution
• eLearning
  WebAssist is using Adobe Captivate and Adobe Acrobat Connect Professional to produce engaging training and product demonstrations that give web developers a better understanding of how to build feature-rich e-commerce sites.

Results
• Increased revenue from software extensions by 44%
• Reduced the time previously required to revise old video content by 85%
• Enhanced customers' engagement with company products through interactive materials
• Extended reach of customer support by offering web-based training available any time

Systems At A Glance
• Adobe Captivate 3
• Adobe Creative Suite® 3 Web Premium. Components used include:
  • Adobe Flash® CS3
  • Adobe Fireworks® CS3
  • Adobe Dreamweaver CS3
  • Adobe Acrobat Connect Professional

Optimizing online presence

In today's time-challenged marketplace, web professionals need to build and deploy attractive, content-rich pages that can be updated quickly and easily. Since 1999, WebAssist has been making web development easier and faster for designers, developers, and e-commerce professionals with its market-leading software extensions that plug into Adobe software.

Based in Encinitas, California, WebAssist helps individuals and businesses improve productivity, increase potential, and extend commercial opportunities with tools to build better websites. More than 250,000 developers and business owners worldwide use WebAssist products to create websites for e-commerce, enterprise, government, and education. WebAssist's flagship product, eCart—an Adobe Dreamweaver® software extension—offers web designers a cleaner, simpler way to create end-to-end online store solutions.

WebAssist provides online training and product demonstrations in support of more than 20 solutions. When the WebAssist developers needed to create a series of product demonstrations, they turned to Adobe Captivate and Adobe Acrobat Connect Professional software to build and deliver intuitive eLearning tools. By leveraging simulations created in Adobe Captivate, WebAssist customers can "test drive" the company's software and get up to speed quickly.

Adobe Captivate flattens the learning curve

Joseph Lowery, vice president of marketing at WebAssist, explains that Adobe Captivate is the best tool on the market for rapidly developing interactive tutorials, training, and product demonstrations. eLearning materials developed in Adobe Captivate empower users at all skill levels to quickly increase their proficiency in a wide range of business processes, such as communicating procedures, meeting compliance standards, training co-workers, or marketing products.

"What I love about Adobe Captivate most is the fact that you can mold training to your way of thinking rather than having the application determine the route," says Lowery. The WebAssist development team used Adobe Captivate to create the tutorial for its eCart solution, enabling users to page through its online store tutorial. Users can easily navigate to any section—from creating a catalog to checking out—and drill down for specific information.

When he first encountered Adobe Captivate, Mark Fletcher, WebAssist's training manager (whose background is eLearning and instructional design), was astounded. "When I came across the level of flexibility provided by Adobe Captivate, I was amazed at how easy it is to visualize content and make edits to audio, text, and graphic components," he says.

Previously, WebAssist developers used a linear video-editing technology to create tutorials. As a matter of course, each time the company launched a new version, the team needed to revise the associated tutorials. Since it was essentially impossible to rapidly revise content using the old video methods, the team basically had to create a new tutorial from scratch.

Adobe Captivate and Adobe Acrobat Connect Professional software is used to build and deliver intuitive, eLearning tools including product simulations and tutorials for WebAssist solutions including eCart. The artwork for WebAssist's online materials is created using Adobe Fireworks CS3 software, a graphics editor that works transparently with Adobe Dreamweaver, Flash, and Illustrator software. Image files saved in Fireworks are easily exported to Adobe Captivate.
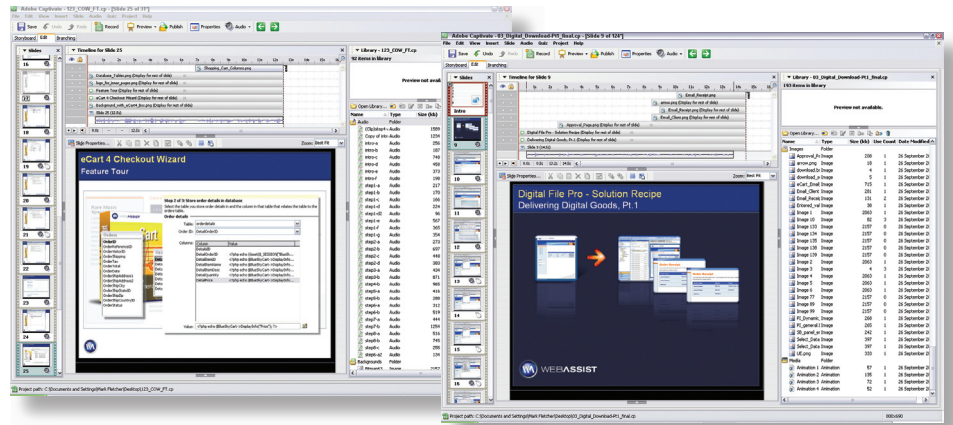
"WebAssist has realized a 44% increase in extension revenue during the first 12-month period after leveraging Adobe Captivate solutions on our site."

Michael Lekse
Vice president of sales
WebAssist

For More Information
www.adobe.com/products/captivate/

"Adobe Captivate is a tremendous time-saver in comparison to using video methodology," says Fletcher. "We estimate that the team saves about 85% of the time that was previously spent making revisions to video presentations. I can deploy material to the team for edit and review much more quickly, and we can easily make changes at the 11th hour."

The rapid production environment in Adobe Captivate allows Fletcher and his team to create just-in-time workflows, giving them the flexibility they need to meet tight deadlines and bring products to market faster. In measuring the Adobe Captivate learning curve, Fletcher estimates that users are up to speed within two hours.

Rapid development increases net results
According to Michael Lekse, vice president of sales, "WebAssist has realized a 44% increase in extension revenue during the first 12-month period after leveraging Adobe Captivate solutions on our site." Additionally, Adobe Captivate has enriched WebAssist's ability to deliver quality service and support as part of its web development toolkits and mentoring services.

"Adobe Captivate software has given WebAssist a cost-effective way to increase our community support and educate prospective clients. Our worldwide customer base needs solutions, support, and training during all international business hours. Adobe Captivate gives us the ability to communicate with visitors and customers 24 hours a day, 7 days a week, via self-paced, interactive tutorials and feature tours—without having to increase our departmental headcounts or outsource services," says Lekse. "Our Solution Recipes, which explain how to create sophisticated web applications step-by-step, have significantly reduced the number of support calls."

Lekse adds that the ability to rapidly prototype eLearning modules, auto-populate graphic revisions universally, and localize content inside Adobe Captivate are tremendous production time-savers. He also notes, "A really important benefit of using Adobe Captivate is that it enables us to retrieve valuable data to create and analyze reports."

Effective, seamless tool integration
WebAssist relies on a wealth of Adobe solutions to enrich the eLearning experience. For example, much of the artwork for WebAssist's online materials is created using Adobe Fireworks CS3 software, a graphics editor that works transparently with Adobe Dreamweaver, Flash, and Illustrator® software. Image files that are saved in Fireworks can be easily exported to Adobe Captivate. "The ability to launch and edit in Adobe tools like Fireworks CS3 from inside Adobe Captivate significantly streamlines our production process," says Fletcher. In the future, WebAssist plans to use its Acrobat Connect Professional server to log user statistics so they can readily see what pages are being accessed most frequently.

The challenge of providing users with trial versions of its products creates a unique blend of marketing and training opportunities for WebAssist. "Using Adobe Captivate to create presentations, we can show people how to use our software using audio, interactivity, and imagery—without requiring them to download anything," says Fletcher.

Adobe

Strategy for the Learner: A Student's Guide to e-Learning Success

By Michael Corry and Ryan Watkins

I n its many forms e-Learning has become an integral part of the training and professional development services in a growing number of organizations. Whether e-Learning in your organization includes just a limited number of online computer courses, the year-around offering of international training courses delivered via satellite, or even simply after-hours programs that allow you to take online college courses, your participation in e-Learning is likely to be an expanding component of your professional development plan, both now and in the future. As a result, you must be prepared to successfully meet the challenges of learning through these high-tech, and often demanding, training opportunities.

Learning how to use the technology, while important, is not enough for mastering e-Learning. From adapting the critical thinking skills that you use when taking notes during a classroom lecture, to adopting new communication skills when working with virtual teams, you must now update the strategies that have led to your success in the traditional training classroom to ensure your equivalent success in e-Learning courses. By building on the techniques that you used in the past (such as group leadership, time management, and critical reading skills) you can improve both your performance in training courses as well as your ability to apply those skills in the workplace.

In this chapter we will provide guidance for how you can improve your e-Learning study skills through combining the most valued skills of the traditional training classroom with the modern capabilities of e-Learning technologies (see Figure 6-1 on page 64).

Use the tips, tools, and recommendations in this chapter to expand your study skills that take advantage of e-Learning technologies rather than letting the new technologies present obstacles to your learning and professional development.

Plan for success

Before you venture into the world of e-Learning, it is important to take a few minutes and assess your strengths and weaknesses in this new learning environment. For areas where you identify weaknesses, you should be prepared to do some work so that they do not become a barrier to your learning experience. Given your past experiences, planning for success may be something that you are not accustomed to doing in a face-to-face training environment, yet it is nevertheless essential if you are new to online learning. When planning for

Contents

In Chapter 6 you will find information about:
- **Plan for success**
- **Update your study skills**
- **Tips for success**

e-Learning success, consider the following:

• *Technology access and protection* – Verify that you have adequate access to a computer and Internet connection. Make sure that your computer is new enough to handle any software you may have to use in the course. Also, confirm that your Internet connection is fast enough for the learning materials presented. For example, if your e-Learning materials contain video, you should have a high-speed Internet connection. If you have a dial-up Internet connection, it will be challenging to get access to the necessary materials. Related to access is technology protection. Do you have up-to-date antivirus and spyware protection? If not, you need to get the appropriate software before you start your e-Learning experience. The only way to make sure you are ready for these types of challenges is to ask in advance. Therefore, before your e-Learning course begins, find out what types of software and materials the instructor expects you to use. This preparation will help you get off to a good start.
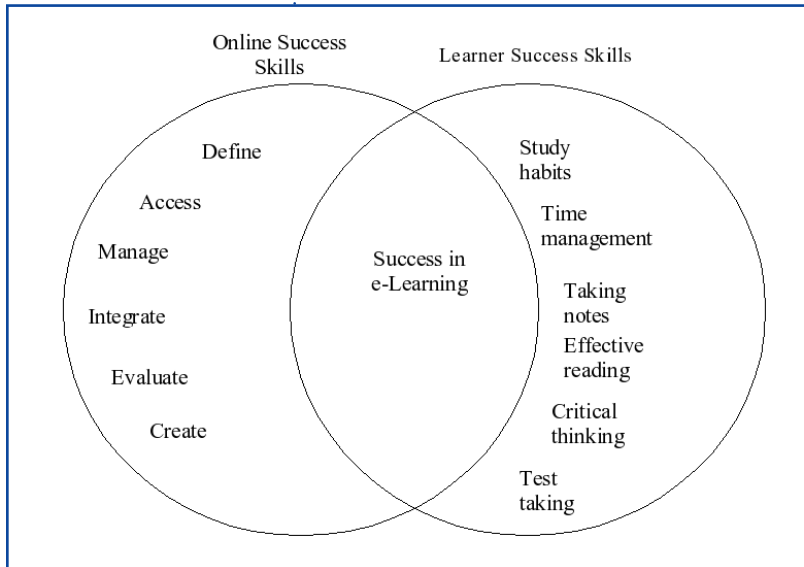
• *Technology skills* – Making sure you have the technology skills required to succeed in an e-Learning class is vital. Start off by determining whether you have the basic skills required to operate a computer and navigate the Internet, since most e-Learning courses will use these tools to some extent. If you do, then assess your ability to download and upload software and files to the Internet. How about your ability to send and receive e-mail messages? Can you send them with an attachment and read an attachment sent to you? While some of these skills may seem simplistic, each one is important to master in order to be successful in an e-Learning environment.

• *Triangulation* – Do you have the necessary skills to evaluate the reliability, quality, and usefulness of online resources? One of the more complex skills is the identification and evaluation of quality and useful online materials. Just remember the rule of "triangulation." If you find something on the Internet three times from different sources and it appears to say the same thing, then it is probably fairly accurate. This is not a hard and fast rule, but it can be helpful. When in doubt you can always contact the author or owner of the Website to verify the accuracy of their information.

• *Communicating online* – Effective communication is key when working in the same room with someone. However, communication becomes even more important in an online environment where non-verbal communications are limited. Communication can include e-mail, chat, or bulletin board exchanges. Can you express yourself clearly in these forms of communication? Could you work collaboratively with others using these tools? Have you ever tried using a chat room with more than two people? Can you carry on an in-depth conversation with multiple people in an e-Learning environment? Related to online communication is the topic of time management. Can you schedule enough time to provide timely and thorough responses? Do you really have time to successfully participate in and complete this online course? It is important to remember that online learning is like many things in life, you get out of it what you put into it. If you cannot communicate effectively online or manage your time wisely, your learning experience and the learning experience of others with whom you interact will diminish.

• *Motivation* – Learning outside a four-walled classroom is a new experience to many people. A

Figure 6-1
E-Learning success (Watkins & Corry, 2004-2007)

key to success is staying motivated. In many online learning experiences, you will never see your instructor or other learners. If you are in an asynchronous learning environment, you may also never have set times to meet with each other. With that in mind, do you have the self-motivation to participate in a course when you seem to be all by yourself? Can you complete work when the instructor is not there all the time? How about managing online distractions like e-mails, Websites, blogs, and such? How about offline distractions, such as the television, children, friends, and so forth? It is important to develop a plan for handling these distractions before you start your online learning experience. Set rules or guidelines for yourself. Develop a schedule of when you will be online and for how long. Also, ask your instructor for feedback on how you are doing. Ask questions such as, "Are my online postings thorough enough?" or "Am I providing regular enough communications?" Staying motivated and applying effective online time management skills are essential to e-Learning success.

Update your study skills

Now that you have identified many of the skills required for success in an e-Learning environment, it is important to identify what skills you already have and which ones will require some additional work. Initially, you will want to focus on the important skills that are likely to present the largest obstacles to your success. Here are some things to keep in mind:

- Your study skills from high school and college likely won't be enough. Most of you probably didn't take e-Learning courses in high school and college, and therefore you can't depend on the skills that helped you to be successful in a classroom as a student to lead to your success online. For example, you will need to update the note-taking techniques you used for college lectures for the new streaming audio and video presentations. Also, if you are into the high-tech gadgets, you may try to do your e-Learning over your iPhone or a similar device. Do you think you can take notes while watching or listening to a Podcast of your class lecture on your iPhone? How will the technology change the way you review material and prepare for assessments? You can do it, you can learn from content delivered by a variety of technologies, but you will have to modify your study skills or acquire new ones in order to ensure your success.

- The first way to be prepared is to take advantage of the technologies that you already use; apply the capabilities of software programs to modernize your study skills. An example is the technologies available in word processing programs. Without a doubt, at some point in your e-Learning experience you will work in a team on a written report of some kind. Since your team members could physically be spread out all over the world, keeping all the versions of your document in "sync" is essential. Luckily, word processing programs now allow you to track the changes made and who made them. Practice using this function and confirm that you understand how to track changes; this will give you an advantage when working collaboratively in an e-Learning team.

- Another way to update your skills is to practice taking notes while reading text, listening to audio, or watching video online. This is not as easy as it looks. When reading online, always have a paper notepad nearby (for example, on your desk) or toggle between your browser and an open word processing page (using CTRL+Tab on a PC, or Command+Tab on a Mac). Also, learn the shortcut keys used to copy and paste written materials directly into your word processing document (using CTRL+C to copy and CTRL+V to paste). When listening to audio or watching video, take advantage of the pause, rewind, and fast-forward buttons to improve the quality of your notes; they can make note taking much simpler. Practicing is essential since taking notes while watching online lectures is a typical study skill required for success in e-Learning courses.

- You can be an active learner by participating in optional activities that are available to you. For

example, don't be shy — try to participate in all discussion board and chat conversations. Not only does this give you additional exposure to the learning activities, but it gives you a chance to fine tune your e-Learning skills. As an added benefit, active participation in these areas helps to build an online community. Belonging to this community can improve your performance in the course, and can help alleviate any feelings of isolation that you may have when you are not in a traditional training classroom with your peers. This is an important item because feelings of isolation are high on the list of complaints by e-Learners.

• With this in mind, another way to be an active e-Learner is to develop online study groups. These groups can function synchronously, asynchronously, or both. Not only do these groups help you build a learning community, but they can develop into both professional and personal networks. Sometimes, the networks that you develop can form a powerful bond that will last for years and be a help to you in many ways.

• Choose the right type of e-Learning course that matches your skill set. Once you have identified your e-Learning strengths and weaknesses, you then should consider what type of e-Learning course will be best for you. Should it be a text-only course, or a two-way video course or something altogether different? Choose your course (or courses) carefully. For example, if you are not confident in your critical reading skills, an e-Learning course that is primarily text-based may not be a good option for you at this time. Remember, e-Learning is not for everyone and not every e-Learning delivery method is for everyone either.

Tips for success

Once you have assessed your e-Learning strengths and weaknesses, made a plan for success, and updated your study skills, you are well on your way to being a successful e-Learner. To take you even further down the road to success, here are some tips that will help on your e-Learning journey:

• *Managing your files* – Each e-Learning class can generate a lot of files. For that reason, file management is crucial. One important tip is to create folders and sub-folders for each e-Learning course. The sub-folders can correspond to activities, assignments, lectures, or other components of the course. Along with the files themselves, develop a naming structure that you can apply consistently. A naming strategy will help you find files much quicker, and help you keep track of documents that may go through many versions before submitting them to the instructor. It doesn't matter what the strategy is, it just has to make sense to you and give you the opportunity to expand it as you get more files and folders.

• *Downloading software* – Downloading software is important, though some software can be harm-ful to your computer if you are not careful. The first thing to keep in mind is to know what you are downloading and make sure it comes from a reputable source. Also, make sure you have up-to-date anti-virus software on your computer to identify if what you are downloading is carrying a virus. There are many different types of software you will download. Some of the more common types include updates, plug-ins, trials, shareware, and freeware. More specifically, your e-Learning course may require you to download Adobe® Reader®, and "players" for multimedia such as Apple® QuickTime®, RealNetworks® RealPlayer®, Adobe Shockwave®, Adobe Flash® Player, or other software necessary to access course content. It is important that you understand what each of these software programs can do for you, and that you download them from the company that makes them. Therefore, spend some time on the Internet and go to the Web sites for each of these types of software and learn about them. Fortunately, most will offer some level of free or trial software that you can test out without purchasing the entire package. The knowledge you gain from practicing this before the course begins will help you succeed in

e-Learning and give you an advantage over others who don't quite understand these software applications and programs.

• *Using e-mail effectively* – Almost everyone knows how to use the basics of e-mail. However, here are some tips that will help you be more effective in your e-mail use. First, as with software downloads, be careful with e-mail attachments. Don't open an attachment unless you know who sent it and you feel it is safe. Also, make sure your anti-virus software is set to scan attachments. Second, pick one e-mail account to use for your e-Learning experience and stick with it. If you are constantly sending messages from multiple e-mail accounts, your instructor and classmates may not know which e-mail account to use to communicate with you. Third, decide whether you want to have Post Office Protocol (POP) e-mail access or Internet Message Access Protocol (IMAP). A consideration here is whether you will always use the same computer when you check your e-mail, or whether you will be using different computers. Usually, if you have a POP e-mail account, your e-mail resides on the computer you check it on (unless you change the setting). Therefore, if you check e-mail on another computer (say, while on vacation), the e-mail messages may stay on the other computer, and when you get to your home computer those messages will not be available to you. However, if you have an IMAP account, the messages reside on an e-mail server, not your local computer, and will be available to you whereever you check your e-mail.

• *Project organization for online groups* – More than likely you will participate in an online group project in at least one of your e-Learning experiences. To be successful, begin by reviewing the instructor's (or the school's) rules, guidelines, and policies for online group work. These may be different than the ones for face-to-face group work. They may present new challenges (as well as opportunities to take advantage of technology). Once you have the opportunity, introduce yourself to your team. In an e-Learning environment, you should share things such as the times when you are available, how you would like to communicate (e-mail, bulletin boards, instant messaging, chat, and so on), what roles you would like to have in the team (leader, note-taker, or something else), and your online contact information. The next step is to identify and assign group roles and tasks; use your project management skills to facilitate a virtual team and you will typically be quite successful. A good step is also to have each group member commit to being prepared for each meeting.

• *Project execution for online groups* – Once you have organized your online e-Learning group, it is time to perform your task(s). As you are doing this it is a good idea to maintain the role you have accepted and follow-up on tasks you commit to complete. You should also demonstrate and encourage good online working relationships. This is even more important in an e-Learning environment where time and distance separate people. For example, review your e-mail messages before sending them to ensure that other group members won't misinterpret your message or be offended. A great tip is to share online calendars so you know when you can get in touch with someone else in your group. Problems with the task always occur and it is important to know how and when you can assemble the group online. Keeping a backup copy of all your files is crucial. You don't want to lose all your hard work when your partner's flash drive decides to act up the day before the project is due. As a final point, be patient with your group members, don't over-analyze online comments, and remember to use the communication strategies agreed upon.

Summary

E-Learning is a whole new world for most of us. It is important therefore to think of it as an innovative way of learning with new, and sometimes different, learning skills. If you approach e-Learning with a systematic mindset you can be successful. The key is to begin by identifying the necessary

skills, and then to assess your current skill set. Second, know your weaknesses and work on updating those skills. Lastly, to achieve ultimate success, study and adopt the tips from experienced e-Learners and those who have been down the e-Learning journey several times. In the end, remember that not all e-Learning courses are for everyone, so choose your online experiences carefully; match your skills with the course technologies. Success in e-Learning can add value to your professional development and, best of all, it can offer you a flexible and enjoyable learning experience.

References

Watkins, R. 2004a. Building Skills for e-Learning Success. *Distance Learning* 1, no. 6: 27-28.

Watkins, R. 2004b. e-Learning Study Skills and Strategies. *Distance Learning* 1, no. 3: 32-34.

Watkins, R. and Corry, M., 2007. *e-Learning Companion: A Student's Guide to Online Success*, 2/E. Houghton Mifflin Company.

Adobe Systems, Incorporated

Adobe uses its software to engage its global workforce in eLearning, maximizing individual achievement and driving business results

Adobe Systems, Incorporated
www.adobe.com

Industry
Technology

Challenges
- Improve employee access to timely learning
- Cost-effectively accommodate different learning styles
- Align learning with corporate goals

Solution
- eLearning
  Adobe uses its software and technologies to integrate rich, dynamic eLearning into operations, providing staff with easy access to valuable learning.

Results
- Improved employee access to training
- Reduced corporate training costs
- Integrated eLearning with existing IT infrastructure and Learning Management System
- Easily incorporated text, audio, video, and interactive discussions into eLearning
- Empowered staff with quality learning anytime, anywhere

Systems At A Glance
- Adobe Acrobat Connect Professional
- Adobe Presenter
- Adobe Enterprise Connect Server
- Adobe Acrobat Professional
- Adobe Captivate
- Adobe Flash
- Adobe Reader®
- Adobe Flex™

Lessons learned

When Adobe employees talk about eLearning, they speak from experience. At Adobe, learning—particularly eLearning—is central to each employee's professional development, helping to synthesize a global workforce into a single, powerful enterprise.

From the time new hires begin their jobs, they engage immediately with Adobe® eLearning. From setting up voice mail to understanding new product rollouts—at tiers spanning interns to executives—Adobe embeds organic, highly personalized learning experiences into its everyday business processes worldwide.

"Providing our employees with easy access to information for learning is critical in our rapidly growing, global company," says Donna Morris, senior vice president of human resources at Adobe. "Whether in sales, engineering, accounting, or marketing, our employees are vital to the company's continued success." With 6,200 employees around the globe working in complex lines of business, Adobe leverages its own software and technology to enable staff to frequently engage in formal and informal learning.

"The type of information that people need to learn continues to evolve as our business expands into new markets and opportunities," says Morris. "When staff can hone skills and collaborate easily with others, the benefits are clear to each individual and the teams, as well as to the entire company."

Adobe takes a holistic approach to learning, going well beyond simple goals of employee retention or developing basic skill sets. The company strives to create a meaningful connection between employee and employer. From this perspective, eLearning is a vehicle for Adobe to invest in its employees and its business, enhancing employee performance and bottom-line results.
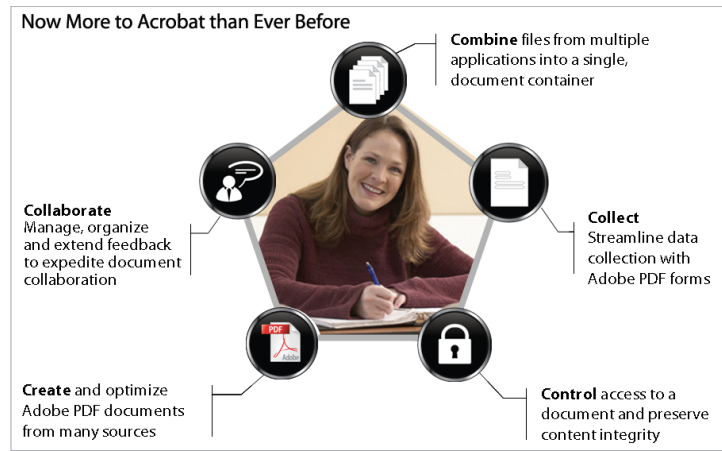
Efficient on-boarding

No matter the size or scope of an organization, orienting new employees is a cornerstone of any business. At Adobe, a central issue surrounding orientation is scalability. That is, how to set out a new employee roadmap while distilling content so new employees get up and running quickly without getting overwhelmed by details.

Using Adobe Presenter, the rapid learning authoring tool inside Adobe Acrobat® Connect™ Professional software, as well as Adobe Captivate™, Flash®, and Acrobat Professional software, the company's Human Resources (HR) team reduced new employee orientation time by a third. "We were able to shorten the live session without jeopardizing the quality of content covered," says Chris Veilleux, learning and development program manager at Adobe.

By matching the right Adobe tool to the right training task, information was simply repurposed to speed learning. For example, the facilities team uses Adobe Acrobat Professional software to

Now More to Acrobat than Ever Before

Combine files from multiple applications into a single, document container

Collect Streamline data collection with Adobe PDF forms

Control access to a document and preserve content integrity

Create and optimize Adobe PDF documents from many sources

Collaborate Manage, organize and extend feedback to expedite document collaboration

convert building plans and other materials to platform- and application-independent Adobe Portable Document Format (PDF) files. Now, instead of having to distribute information in cumbersome three-ring binders, facilities information is available in Adobe PDF online anytime, anyplace for new hires trying to navigate their surroundings.

Other time-saving, new-hire training strategies include using Adobe Presenter to create interactive online courses that outline employee stock purchase plans, explain benefits packages, and even show a corporate overview movie created in Adobe Flash.

"We've added thousands of employees over the past few years to support our growth," explains Veilleux. "We need to know that training information can be created and updated rapidly as well as presented efficiently. It is essential to engage employees with easy-to-use modules that enable more just-in-time learning on the job, instead of a bunch of details offered up during live orientations."

In addition to using Adobe software for new-hire training, eLearning has become an informal, everyday practice throughout the company. For example, the entire Learning Professional community at Adobe can use Adobe Contribute® software for blogging, so staff can "keep up-to-date on the latest industry information, talk freely about challenges, and readily share ideas about how Adobe tools can improve processes inside and outside our organization," says Veilleux.

Stronger sales training

As manager of worldwide sales training, David Alper oversees eLearning for hundreds of direct sales representatives, the Adobe sales engineering community, and the inside sales organization. When Alper first joined Adobe a few years ago, most training was done in face-to-face meetings with project managers and typically required a lot of time-consuming and expensive travel.

"Now, most everything we do leverages Adobe technology," says Alper. By identifying gaps, creating templates for consistency, and incorporating feedback into the training loop, there are sensible sales education tools for everyone to follow.

The online blended learning modules in Acrobat Connect Professional cover everything from how to handle routine administrative processes to broader topics such as in-depth looks at the latest Adobe LiveCycle®, Acrobat, and Creative Suite releases, as well as vertical solutions that encompass multiple products. At the same time, the sales training team also makes extensive use of Adobe Presenter and Adobe Captivate to create hosted eLearning modules and curriculums.

To help meet the needs of Adobe's sale force, the company calls upon the eLearning capabilities in Adobe Captivate. All Acrobat Connect Professional training sessions are converted to audio-only mp3 files that representatives can download for podcasting. The sound files are deployed via an RSS feed on one of two dedicated iTunes channels, one for sales and one for technical staff.

Easily create Flash learning content to share ideas and information
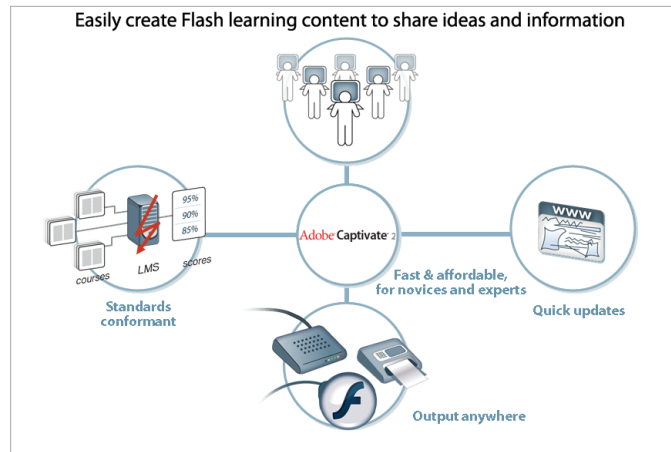
Previously, important product and service issues were typically communicated via non-interactive documentation, such as an e-mail that would trickle down the sales management pipeline to teams. Now, if a product change or new competitive information becomes available, Adobe can use Acrobat Connect Professional to engage hundreds of sales people in real-time web conferences. Equally important, the session can be recorded, so people who were unable to attend the live session can replay it on demand.

While the Adobe sales organization hasn't precisely measured the cost savings from its eLearning practices, the efficiencies are evident. For instance, since online learning can reduce the need to bring hundreds of sales representatives together for on-site meetings, the savings are significant.

Plus, the resulting sales performance can boost the company's revenues. "Providing effective, on-time training could enable a rep to greatly increase the size of closed deals," says Alper. "With hundreds of sales managers worldwide, the cumulative benefits are substantial."

Additional efficiencies in eLearning are achieved thanks to the use of Adobe Flex to create a dynamic, engaging interface for launching eLearning services. Adds Alper, "We now have an intuitive front end to direct employees easily to training where and when they need it."

Transforming eLearning and engagement

For Marc Eaman, an Adobe evangelist and member of the Technical Marketing Team, eLearning has provided several advantages. He has been doing product demonstrations at the company for eleven years. During most of that time, demonstrations were painstakingly created with written scripts that told sales managers what-to-say and where-to-click. Many sales and training staff felt there had to be a better way and responded with a resounding: "show us, don't tell us."

"By leveraging Adobe tools and making learning relevant and better connected to workflow, Adobe employees experience the same benefits that our customers enjoy— eLearning environments, tools, and resources that engage people and keep them coming back again and again."

Ellen Wagner,
Director of eLearning,
Adobe Systems, Incorporated

For More Information
www.adobe.com/products/acrobatconnectpro/

Using capabilities in Adobe Captivate and Acrobat Connect Professional software, the Adobe demonstrations have been transformed from scripts to interactive guides. The new model is an on-demand Acrobat Connect Professional session that includes some slides to help position the solution, followed by a screen recording captured in Adobe Captivate of the actual demonstration highlighted. A document is also included—via the Connect Attachment feature—to provide field representatives with more detail if necessary.

Currently, more than 150 courses are available to the field. At the same time, the training group is using another innovative technique—branded InField discussion forums—that targets technical personnel and sales representatives through online forums. "Forums are popular for two reasons," explains Eaman. "First, if one sales representative has a question, chances are ten others do as well. Second, product experts do not like having to answer the same question repeatedly."

Forum question and answer sessions are always available and searchable, enabling users to find relevant topics and resolutions quickly. The system also allows the uploading of files to facilitate the exchange of samples and requested documents. Product experts are assigned as forum moderators to respond to questions generated by the system. Notably, RSS feeds are incorporated into forums so moderators can simply subscribe to topics.

With the help of eLearning capabilities in Adobe Captivate, the company can meet the needs of its occasionally connected sales force. "We convert all our Acrobat Connect Professional training sessions to audio-only .mp3 files that representatives can download for podcasting," says Eaman. The sound files are deployed via an RSS feed on one of two dedicated iTunes channels, one for sales and one for technical staff.

Integrated learning management

Anne Storer, director of learning and development at Adobe, uses Adobe solutions for eLearning efforts aimed at helping managers handle infrequently applied tasks, meet compliance requirements, provide technical training, and deploy leadership development materials. Regardless of the Adobe solutions used, the goal is to impart knowledge in engaging modules that quickly and clearly convey desired learning.

"Newer approaches to learning are intimately connected to technology," says Ellen Wagner, director of eLearning at Adobe. "By leveraging Adobe tools and making learning relevant and better connected to workflow, Adobe employees experience the same benefits that our customers enjoy—eLearning environments, tools, and resources that engage people and keep them coming back again and again."

The eLearning Guild

375 E Street, Suite 200
Santa Rosa, CA 95404

+1.707.566.8990
www.eLearningGuild.com