

# BLENDED LEARNING OPPORTUNITIES

By **Allison Rossett** and **Rebecca Vaughan Frazee**

## CONTENTS

- Blended Learning Opportunities
- What Is Blended Learning?
- Why Blend?
- What Goes into a Blend?
- What Types of Blending Make Sense?
- How Does Blended Learning Affect What People Do?
- QUICKLIST 1: Are Employees Ready for Blended Learning?
- QUICKLIST 2: Are Managers Ready for Blended Learning?
- QUICKLIST 3: Are Executives Ready to Reorganize the Organization for Blended Learning?
- How Do We Look at the Effectiveness of Blends?
- Blended Learning: Bridging the Classroom and the Workplace
- QUICKLIST 4: I Want to Learn More About Blended Learning
- References

Copyright 2006  
American Management Association

## What is blended learning?

In 1958 the milk monitors at Public School 164 in New York City experienced a blend of approaches to help them learn to distribute the milk to other youngsters. Loading and carrying was demonstrated. They were coached by their supervisor on handling leaks and mashed cartons, and moving from one classroom to the other in safe and orderly fashion. They were paired with a more experienced monitor to try milk delivery the first few times.

Ingrid, a German engineer, wanted to become a fluent English speaker. She conversed in English in online chat rooms. She vacationed in English speaking places and hung out in cafes. She studied English language tapes. And she sought a British boyfriend who spoke not a word of German.

It's not different for financial services representatives today. Many go to class. They rely on a manager for coaching. And they have materials to which they refer when they need to know more about a product or situation. These materials are available any time, anywhere, online from a comprehensive support system.

The point, of course, is that milk monitors, language students, financial services professionals, and everybody else, no matter their century or age, are well served by something not novel or radical or trendy or even necessarily techie. They profit from a well-crafted blend.

## What is blended learning?

**Blended learning (BL) integrates seemingly opposite approaches, such as formal and informal learning, face-to-face and online experiences, directed paths and reliance on self-direction, and digital references and collegial connections, in order to achieve individual and organizational goals.**

- **BL is devoted to learning and performance.** From the organization's perspective, blended learning is about improving performance and achieving business objectives. From the employee's perspective, blending is about getting work done, when and where a need emerges, more typically at a time and place of the employee's choosing.
- **BL takes many forms.** Blending might involve structured or casual interactions with instructors, peers, coaches, mentors, and supervisors. It happens in classrooms, on ships, at home, and in the field, even the

battlefield. It might involve time spent independently with reading material, online modules, databases, reference manuals, templates, checklists, worked examples, or hours engaged on a group assignment or conversation with peers. Technology is central to some blends, less a part of others.

- **BL addresses that nagging concern about transfer of training.** BL is the next step in a continuing commitment to systems, results, and performance. If you are concerned about lessons that stop at the classroom door and events limited to time and place, BL has much for you.
- **BL relies on compelling assets and experiences.** As we move from instructors to blends, from classroom to field, participation and results are the hands of employees. Employees can elect to skip entire programs or elements that feel superficial, complicated, or irrelevant, in favor of their “real work.” Thus, BL programs and assets must present themselves as worthwhile and manageable.
- **BL capitalizes on the resident smarts in the organization.** BL presses people and organizations to find, store, stir, and share what they know. A database might help sales people re-use parts of proposals. Far-flung hotel administrators can “ask the experts” through FAQs, email, phone calls, or live video streams. Employees may turn to their supervisors to practice a skill or explore an idea.
- **BL promotes connections and conversations.** BL encourages the organization to extend lessons and conversations far beyond the classroom and into the workplace through coaching, e-coaching, and online communities. A sales person who has learned about a new product can chat with more experienced colleagues attempting to bring that product to Asia. An executive can reach out for expert views from a trusted e-coach. A researcher can reflect with others on the investment team about how a natural disaster should influence their choices.
- **BL guides, directs and tracks.** BL must do two things: first, it must propel action, showing employees how to benefit from the blend, how far they have come, where else they need to go, and what else is possible; and second, it must simultaneously encourage smart choices and involvement. Diagnostics, assessments and feedback, menus, and sample paths can be used to tailor experiences, assets and activities.

*“Everyone is overworked and no one has any time for traditional development approaches and methods. Organizations need simpler management-driven approaches and tools that are designed to make continuous learning and development an integral part of the process.”*

*(Sullivan, 2005, July)*

## Why blend?

Blended learning has a growing presence in workforce learning and performance. Kim and colleagues' 2005 survey of 200 training professionals in the United States predicted an increase in the use of BL in their organizations. In another survey of almost 300 training professionals in the US and UK, ASTD and Balance Learning reported that more than two-thirds of respondents ranked blended learning as “the most effective and cost-efficient form of training,” and indicated that “blended learning will make up about 30% of all corporate training budgets by 2006,” (Sparrow, 2004).

That others are doing it is interesting, but not conclusive. Far more compelling are studies and experiences that suggest BL works. What might blended learning do for you?

### • *Nurture a world-class and worldwide workforce*

Globalization, offshore outsourcing, and franchising are changing the nature of organizations and the needs, location and experiences of their employees. Executives expect workforce learning to translate into performance, and to make contributions—big ones. Do they want their sales people in class or out in the field? Do they want consultants with each other or customers? Do they want knowledge acquired in class nine months ago or access to ideas and perspectives that reflect what is happening today? As organizations have shifted to customized and boundaryless services, knowledge and expertise must follow and surround peripatetic employees.

### • *Provide consistent and updated messages*

Instructors are a great resource during training, but their messages sometimes differ from one to another, and their smarts depart after class. Technology, on the other hand, can deliver standardized messages,

*“Three factors will change the face of traditional training and development: increased global competition, outsourcing and smart suites. The most visible of the three, smart suites, will integrate learning at the desktop with an employee’s other tools such as e-mail, calendaring, IM, and document management. In this environment informal learning is pumped-up and the line between learning and doing fades.”*  
 —Margaret Driscoll, IBM Global Services (Neal, 2004)

instructional and otherwise, consistently, tirelessly, swiftly, repeatedly, patiently, around the globe. Online modules, knowledge bases, and archived presentations do not get jet lag.

- **Exploit technology**

Dropping prices and increasing functionality mean that more people around the world are plugging in, with and without wires. The number of PCs is projected to surpass 1 billion in 2007, and the number of PDAs is anticipated to reach almost 60 million by 2008, with most boasting wireless email and web browsing capabilities (*eTForecasts, 2005*). Ipsos-Insight reported that at least two-thirds of all Internet users connect via high speed broadband (*Modi, 2005*). Of course, cell phones are everywhere—a whopping 1.5 billion and counting. They can be used for mobile training, coaching, and performance support. Internet browser capabilities allow employees to access web-based databases or search engines through their cell phones. Short text messaging (SMS) can be used to send coaching tips, quizzes and knowledge checks, or to measure training transfer. And video clips can provide short examples of desirable performance in areas such as negotiation, managing meetings, or customer service.

- **Foster independent habits for learning and reference**

Learners like choices (*Reigeluth & Stein, 1983*). With BL, employees can progress at their own pace and even repeat parts of the program (*Zenger & Uehlein, 2001*). They can participate in communities and relationships, and enjoy interaction, guidance, and encouragement from peers, instructors, supervisors, and coaches. For those who are reluctant to turn exclusively to independent learning, blended forms anchored in the classroom can pave the way.

*Training professionals surveyed in 2004 “predicted that knowledge management tools, online simulations, wireless technologies, and reusable content objects would impact the delivery of e-learning most greatly during the next few years...[and that] authentic cases and scenario learning, simulations or gaming, virtual team collaboration and problem solving, and problem-based learning would be used more widely in the coming decade.” (Kim et al., 2005)*

- **Converge learning and work**

In the traditional instructor-led world, you are either IN class or AT work. Not surprisingly then, instructors and managers worry about transfer. That is less of a concern in a blended situation because BL brings learning, information and support to where the work gets done (Rossett, 2005b). Got a question? You can look it up online. Got a problem? You can chat with your manager or share it with an online community. Eager to get better at personnel management? Fortunately, there’s a course you can take and a pre-assessment that will make certain you’re ready for that course. AMA’s blended approach capitalizes on this benefit.

- **Improve performance and control costs**

Studies report increased cost-effectiveness (Graham, Allen, & Ure, 2003), and increased productivity for those using a blended approach as opposed to e-learning alone (Thomson/NETg, 2003). Other studies have reported enhanced employee retention (Bersin, 2004; CLO, 2005a; Nelson, 2005), and reduced training time for blended approaches (Zenger & Uehlein, 2001). In addition, online resources can be easier and cheaper to update and distribute (Osguthorpe & Graham, 2003). Singh (Singh, 2003) noted that less expensive solutions, such as virtual collaboration, coaching, recorded live events, and self-paced materials, can be used instead of more expensive customized computer-based content.

If studies and opinions do not attract you to BL, consider that it just plain makes sense. Who wouldn’t benefit from additional opportunities to practice and reflect, targeted resources, engaged supervisors, interactions with experts and peers, and advice and learning experienced right there, within the workflow?

## What goes into a blend?

### A tour of assets

#### • The classroom

In a 2004 survey by the eLearning Guild (*Pulichino, 2005*), respondents recognized classroom instruction as the most frequently used part of a blend. According to some, it is still the best way to learn. AMA's 2004 research made that point, "More than two-thirds of American organizations agree with training experts that classroom training—with its opportunities to interact with capable instructors and interested peers—is the best way for adults to acquire the new skills and behaviors that they need to move their careers, and their companies, forward." The classroom remains a critical component of blended learning and is not going to disappear any time soon.

**Table 1. What Might Go in the Blend**

<b>Live face-to-face (formal)</b> <ul style="list-style-type: none"> <li>• Instructor-led classroom (F2F)</li> <li>• Workshops</li> <li>• Coaching, mentoring</li> <li>• On-the-job (OTJ) training</li> <li>• Work-based problems</li> </ul>	<b>Live face-to-face (informal)</b> <ul style="list-style-type: none"> <li>• Collegial relationships</li> <li>• Work teams</li> <li>• Apprenticeships</li> </ul>
<b>Virtual collaboration/synchronous</b> <ul style="list-style-type: none"> <li>• Live e-learning classes</li> <li>• E-coaching, e-mentoring</li> <li>• Instant messaging, SMS</li> </ul>	<b>Virtual collaboration/asynchronous</b> <ul style="list-style-type: none"> <li>• Email</li> <li>• Online communities and discussion boards</li> <li>• Listservs</li> <li>• Blogs, wikis, podcasts</li> </ul>
<b>Self-paced learning (print, CD/DVD, electronic, wireless)</b> <ul style="list-style-type: none"> <li>• Online modules</li> <li>• Online resource links</li> <li>• Simulations and scenarios</li> <li>• Assessments and self-assessments</li> <li>• Workbooks, readings</li> </ul>	<b>Performance support</b> <ul style="list-style-type: none"> <li>• Online help systems</li> <li>• Print job aids</li> <li>• Online knowledge databases</li> <li>• Documentation</li> <li>• Performance support tools</li> </ul>

*Adapted from (Rossett, Douglass, & Frazee, 2003, July)*

• *Coaching, e-coaching, e-mentoring*

Coaches can be used to demonstrate, model, remind, critique, guide, nudge and nag, in person or using technology. The key is finding knowledgeable, credible coaches who are willing to do what needs to be done on an as needed basis. Today most coaches rely on some form of electronic means to communicate, if only to arrange appointments. But e-coaches go further, typically using the internet strategically (*Rossett & Marino, 2005*). Relations and skills can flourish online too, using Instant Messaging with voice and video, for example, to coach a sales pitch, discuss approaches to a product launch, or rework a job description.

• *Blogs and Wikis*

A blog, short for web log, is a website that contains a chronological collection of journal-style entries on a given topic, constantly and easily updated by an individual or group. Blogs typically allow readers to comment by adding their own entries, rather than altering existing ones, which can provide a rich array of perspectives and opinions. Unlike text-only threaded discussion boards, blogs look good with their embedded hyperlinks, images, and custom layouts. See an example of a blog at the HR Blog, where managers can congregate to discuss human resources issues. Plant managers at DaimlerChrysler U.S., for example, use blogs to discuss and keep track of problems and their solutions, and IBM employees worldwide use blogs to maintain a running tab of software development projects and business strategies (*McGregor, 2004*).

A wiki (quickly, quickly, in the Hawaiian language) is a website where several authors come together online to quickly generate and modify content. Wikipedia.org is an example. One financial services company uses a wiki to keep experts talking about a difficult topic and to then use their collected thoughts to educate less experienced employees.

Blogs and wikis are designed to facilitate fast and inexpensive collaboration and information sharing. Think of them as grassroots tools because they put more power in employees' hands. Blogs and wikis "... allow the user to determine the relevancy of content rather than being dependent upon a central distribution center or a linear distribution chain. After the initial setup, users, not administrators, control a wiki, to the benefit of both" (*Goodnoe, 2005*).



*We must look beyond the boundaries of traditional training, and beyond the boundaries of the course. Certainly this will take us into performance support and knowledge management, but we must go further, bleeding e-learning into corporate communications, workplace learning, marketing, recruitment, customer learning, searches on the web and the real world. This expansive view of learning delivery offers lots of scope for exciting new approaches to blended learning.*

*.... The learning organization is built not on the premise of more training. In fact, in the case of formal training, less rather than more may be required. It is built upon the need for learners to feel motivated towards achieving goals through continuous learning. (Clark, 2003)*

#### • *Online communities*

Online communities can expose participants to the skills, knowledge, and culture of their profession. Though typically informal in nature, online communities benefit from the care of an online moderator who can manage the flow and pace of discussions, pose and answer technical questions, and sustain group process. In a study of an online community of coordinators for Alberta Community Adult Learning Councils, Gray (Gray, 2004) found that participants “perceived the role of the moderator as ‘absolutely critical’ in starting up, supporting, and sustaining the informal online environment.”

#### • *Performance support*

Performance support puts the smarts at employees’ fingertips rather than inside their heads (Rossett & Mohr, 2004). Support may include online help systems and knowledge databases, decision tools, documentation, templates, job aids, and so forth. In the U.S. Coast Guard, to complete safety inspections aboard vessels, officers rely on their personal digital assistants (PDA). The PDA walks them through a series of questions about the vessel and customizes an inspection checklist.

## What types of blending make sense?

Blending is all about decisions. Managers must decide:

- Which assets to buy, build or adapt, and how they will be maintained;
- How and when to leverage the precious human resource provided by experts and instructors;
- How much guidance and independence employees will enjoy;
- What kind of guidance system and support will be provided, if any at all, and whether assistance comes from the instructor, an expert, the manager, or an automated program.

Graham (2005) suggests that most blends today are collections of separate, stand alone F2F and/or online components from which learners pick and choose. Direction is minimal; freedom is maximized. Citicorp Latin America successfully deployed such a blend with instructor-led workshops and web-based modules for sales training. After the basic training class, sales people may or may not elect to complete the modules. Likewise, some who completed the modules may not have attended the F2F workshop.

In a more directed blend, components are presented within a defined learning system. Integration might come from diagnostics that point learners to specific lessons, resources, or assessments that culminate in a certificate or other form of recognition. For example, students studying project management at Defense Acquisition University can take self-assessments that check their understanding of content from prerequisite courses, and point them to topic areas in preparation for the next course.

## Three blended models

### *Anchor Blend*

An Anchor Blend starts with a defining and substantive classroom event, followed by independent experiences that include interaction with online resources, structured workplace learning activities, online learning and reference, diagnostics, and assessments.

Schneider Electric, an international company with more than 85,000 employees worldwide, uses an anchor-blended approach for their professional managers development program (PMDP) (*Whitney, 2005*). Richardson and eCornell use an anchor blend for a sales and service

training program that launches with a highly interactive classroom event followed by online modules for continuous reinforcement (*CLO, 2005b*).

### **Bookend Blend**

The Bookend Blend is characterized by a three-part experience: something introductory, an essential, substantive and meaty learning experience, online or F2F, and then something that concludes and extends the learning into practice at work.

As shown in Figure 1, AMA's three-part approach to blended learning combines "before-the-seminar" elements such as web-based pre-assessments and a customized "seminar learning plan," then substantive F2F seminar experiences, concluding with "after-the-seminar" post-assessments. If post-assessments reveal skill gaps, participants are encouraged to participate in small "tune up" courses, additional readings and other related materials (*Leonard, 2005*).

**Figure 1. The AMA Blended Learning Experience**



Mail Boxes Etc., now UPS, relied on substantive classroom experiences, with on-the-job training as their bookends. The four-week blended program for new franchisees started with one week of training on-the-job combined with online courses. After that grounding in the field, employees attended two weeks of classroom training at a regional training site. Finally, they returned to their stores for more on-the-job training supported by online resources.

### **Field Blend**

The Field Blend is most distinct from training-as-usual. It is employee-centric, with each individual surrounded by many kinds of assets and continuous choices about when and where and whether to reach for them.

Although a classroom experience is often part of the Field mix, it is but one method of many, with the focus on independent and persistent choices and continuous learning and reference at work. The Field Blend requires employees to commit to continuing growth and effort, relying on defined expectations, engaged managers, and assessments that point to resources. Key to the effort, of course, is provision of a treasure trove of resources and some way to find what's there and what's right for you or your people.

For example, for engineers at Shell EP, blending relies on authentic workplace problems as grist for learning. As they work through these real-life problems, employees share their experiences, work product, and reflections by contributing to an online repository. Engineers might compare their situation to a colleague's, or look for trends in the field and relate those to the course materials. Their contributions become content objects which can be reused for follow-up activities (*Margaryan, Collis, & Cooke, 2004*).

A global technology company uses a blended approach for management development. Once individuals become managers, they are paired with other new managers and provided with ongoing access to learning, communications, assessment, feedback, and information. Participants receive basic management content through self-paced online modules, they learn through interactive scenarios, and they use an online workspace to collaborate with peers and experienced e-mentors. The learning management system provides tracking and periodic assessment so that dedicated tutors can follow and coach participants' progress. The classroom remains a part of the blend, with managers and their mentors meeting F2F to advance lessons learned online.

## Comparing three BL models

### • Familiarity

The Anchor Blend will feel most familiar because it starts in the classroom. In the classroom, an instructor leads the group through structured experiences and introduces other more independent options, online and otherwise. The classroom moments are essential because employees are taught content and how the blended system works. New roles and expectations are introduced. Relationships are nurtured and a taste is developed for the continuing engagement and independent efforts to follow.

• *Authenticity*

The Field Blend will feel the most authentic because learning is there, within the flow of work and life. When time allows or because a pressing need has emerged, the employee seeks out a supervisor, experiences an e-learning module, or consults an e-coach, online knowledge base, print documentation, or FAQ.

• *Independence*

While all blends require independent choices about engagement by employees, the Field Blend is predicated on it. It delivers a buffet of resources and relies upon nutritious habits by employees over time, as they work. In contrast, employees typically experience the Bookend and Anchor Blends as a group. While some independent action is required, a group of employees typically follows similar and defined learning paths.

• *Simplicity*

Nothing, of course, is as simple as scheduling a class, hiring an instructor, and filling the seats. And that's not all that simple. Still, in comparison with each other and from the perspective of participants and managers, the Bookend Blend is most simple of all. Purposely constrained in the number of assets, and forthright in defining what to do and in what order, the Bookend Blend comforts by stating, limiting, and directing choices. This makes good sense for novice or reluctant participants. The benefits of extension into the workplace and a continued conversation are there; the degrees of freedom have been bounded, but not so much as to lose the benefits of practice and learning set in the real world. AMA's Bookend Blend, for example, assures and guides learners through defined elements before and after F2F experiences.

## How do I craft a blend?

*Table 2. Consider the audience*

The total audience is small (<250)	<ul style="list-style-type: none"> <li>• Rely on the Anchor or Bookend Blends to guide involvement, capitalize on instructors' talents and expertise, and reduce and define options. Consider live e-learning events and e-coaching. Informal and low cost approaches are useful, such as supervisor coaching, lunch chats, listservs, email, documentation, databases, e-coaching, and resource links.</li> </ul>
The total audience is large and far-flung	<ul style="list-style-type: none"> <li>• Technology will help meet the needs of dispersed employees. For large numbers, and where content is stable, consider development and maintenance of media-rich assets such as online modules, high-quality video and audio, scenarios, simulations, and online help systems. Asynchronous and synchronous events, e-coaches, online communities and listservs with involved experts will also work here. Ensure guidance systems that allow users to search and find what they need.</li> </ul>
Employees are hesitant or resistant	<ul style="list-style-type: none"> <li>• If they doubt themselves or the topic, rely on human guidance and interactions to coach and motivate. Ensure that participants experience success through an active instructor, live e-learning, and supervisory coaching. Anchor and Bookend Blends are suitable. The Field model is less so.</li> </ul>
Employees like the classroom	<ul style="list-style-type: none"> <li>• No surprise here. They are accustomed to it. The Bookend Blend holds promise for employees keen on the classroom. The Anchor Blend also makes sense here. Use classroom events to demonstrate how technology can deliver answers as needed and nurture interpersonal connections through synchronous events, e-coaching, resource links, and online communities.</li> </ul>

*“Self-training (e.g., e-learning) faces four major challenges: The ability to get employees motivated on their own; No access to continuous personalized support; No other learning tools besides the course materials employees and managers use; No extensive hands-on practice so new skills can be immediately applied on the job.” (AMA, 2004)*

Employees are diverse and so are their interests and challenges

- The Field Blend allows for many tastes and preferences. The challenge is to provide a guidance and search system, rich and updated resources, and ways for individuals to combine their experiences in ways that are rewarded and recognized.

### Table 3. Consider results and reality

The content changes often

- Different content requires different amounts of maintenance. For volatile content, develop assets that are easier and cheaper to build and maintain, such as online resource links, databases, listservs, email notifications, live e-learning, online documentation, and live coaching and mentoring in class or via personal relationships.

Employees must demonstrate that they know their stuff

- If employees must know it by heart, any of the three models will work. What's critical is to invest in extensive practice and feedback over time. Use online tutorials, workbooks, simulations, coaching, e-coaching, and classroom practice sessions. Measure achievement. Track effort and progress. Provide feedback. Consider certification.

Our people need to be at work, not in class

- If there is little time for employees to attend training, provide them with what they need at work, in the workflow, and linked to pressing questions and tasks. Rely on resources that aren't time-dependent, such as self-paced learning modules, examples, readings, and asynchronous

*"When you have senior management doing the teaching, they have so much credibility with the workforce. Because they take the time to teach, it shows true sponsorship and true engagement, and I think then employees learn even more. It gets back to the manager being the most important person in an employee's life," says Rita Danker, vice president of organizational development and human resources at Schneider Electric. (Whitney, 2005)*

discussions. Provide short targeted lessons and knowledge resources that are linked to their challenges and tasks. Whenever possible, minimize training and insinuate performance support and job aids into the work. If employees are committed and eager, the Field Blend should work. If they are less keen or confident, get supervisors, managers and instructors involved to encourage employees to habitually feast from accessible resources targeted to questions.

## How does BL affect what people do?

Blended learning redefines what everybody does.

### Employees

Blended learning shifts responsibility for learning from the instructor to the employee. For many, this is not an easy transition. They like what they know – classroom experiences led by instructors – and are often uncomfortable and not particularly adept at learning more independently and online. “An important finding in the education literature is that many students given

#### Quicklist 1: Are employees ready for blended learning?

- Are they eager to know more about this topic?
- Can they successfully navigate the technology?
- Are they ready to assess skills and knowledge and act based on what they find out?
- Do they like to look things up on the computer?
- Are they willing to take responsibility for their own learning and development?
- Do they like to talk and read about ways of doing their jobs better?
- Do they know how to manage time and distractions?
- Do they know what might get in their way and have ideas about how to mitigate obstacles?
- Do they know unit priorities and that their supervisors are supportive of their continuous growth?
- Are they willing to seek help from a peer or mentor?

(adapted from Rossett & Schafer, June 2003)



control over their own learning choose to terminate the experience before mastering the training task,” (Brown, 2001).

Provide useful, clear guidance systems that link to work and career paths. Help employees consider their readiness to learn continuously and independently. Think about your employees. Are they ready? What might get in the way? Quicklist 1 can help reflect on their readiness.

### **Supervisors/Managers**

Blended learning, because it often occurs in the workplace, depends on an active supervisor or manager. When BL is in place, managers and supervisors must coach, guide, track, motivate, and encourage. They can influence F2F or online, formally and informally, synchronously and asynchronously. Quicklist 2 raises questions for managers.

To support the development of new real estate agents at Century 21, managers are given a coaching guide to answer questions, contextualize the content, and provide on-the-job learning opportunities as new agents participate in online and F2F training. General Electric and Intel define employee development as a part of the manager’s job.

Shell EP used a ‘learning agreement’ between the learner and manager that detailed expected performance improvement to result from the course. While learners were pleased with the learning agreements/contracts they developed with their managers, managers were less enthusiastic. The researchers concluded that “It is necessary to identify additional tools and strategies to involve the line managers, to extend their role from “approving” the participation in the course to being a full partner in the learning process,” (Margaryan et al., 2004).

#### **Quicklist 2: Are managers ready for blended learning?**

- Do managers know what BL is?
- Do managers understand their roles in BL?
- Do they know why they are needed?
- Can they picture what their participation and support might look like?
- Are meaningful incentives in place for managers to be active within the blend?
- Are participation and support in the BL program part of managers’ job descriptions and performance reviews?
- Do managers have the skills and knowledge to tackle these new responsibilities? Do they know enough about particular programs?
- Are there cases, examples, and templates to help managers know what to say and do within the blend?
- Have they had opportunities to discuss their new roles and to practice them?

*In a 2004 survey of training professionals, “in terms of skills required by online trainers/instructors, a majority of the respondents predicted that by 2010, online facilitating or moderating would be the most vital skill for online trainers/instructors, followed by online mentoring, lecturing, and evaluating or assessing skills.” (Kim, Bonk, & Zeng, 2005)*

## Instructors

In a BL system, teaching is important, but not sufficient; instructors do more than teach. Through online systems, they might monitor and nudge employees’ progress, moderate a discussion board, coach managers, enliven online communities, offer feedback on a group or individual task, analyze workplace readiness, and post answers to frequently asked questions.

In Avaya’s blended learning courses, instructors act as experts and consultants, helping students analyze and solve problems. They work with students in the classroom to develop diagnostic and trouble-shooting skills, and they provide online support by monitoring student progress. At the Defense Acquisition University, instructors are growing into coaches and performance consultants. They tailor services to needs and are measured, in part, by the satisfaction of the people they serve in these new ways.

## Experts

One of the nifty things about blends is that content experts can be involved in small yet targeted ways, in person or via technology. They may be used to enhance a specific lesson, or called upon as a “go to” person in the field with questions, guidance, and resources. Wyndham International, Inc. uses a system that works much like the online dating service, Match.com. Wyndham’s system connects hotel employees to experienced people who can answer questions.

## Executives

The executive’s role is to provide an organizational environment that is collaborative and cross-functional. Here is where learning professionals and business leaders foster a learning culture that extends beyond classrooms and into the workplace.

Before embarking on BL, executives should examine where they stand. Quicklist 3 will help.

**Quicklist 3: Are executives readying the organization for BL?**

- Do executives see the link between this program and their strategy? Can executives describe how the blended program furthers organizational goals?
- Does the executive know what BL is and what benefits the approach brings?
- Does the executive know how BL programs typically fail?
- Have executives worked with workforce learning professionals and line managers to consider what might get in the way as their organization moves to BL?
- Where obstacles are anticipated, what mitigation is in place?
- Has the executive worked with management to nurture a learning culture?
- Has the executive worked with the individuals involved with BL to assure that evaluation will happen and the program will be continuously improved?

## How do we look at the effectiveness of blends?

In a recent survey by the eLearning Guild, respondents projected an increase in measurement of e-learning based on business impact (*Pulichino, 2005*). Good intentions aside, according to the ASTD 2004 State of the Industry report, evaluation that targets field results is far from universal. What we attempt to do here is to provide a brief overview of the possibilities for measuring BL.

### *Approaching measurement: Then and now*

One approach to measurement, Kirkpatrick's four levels of evaluation (*Kirkpatrick, 1998*), has enjoyed decades of popularity (*ASTD, 2003*; (*Pulichino, 2005*)). Kirkpatrick's model is based on four levels, commencing with the most familiar concerns and concluding with the most strategic: (1) *Did they like it?* Were employees satisfied with the experience? (2) *Did they get it?* Did employees learn? Can they do it? (3) *Do they do it at work?* Did training transfer into performance back on the job? (4) *So what?* Does performance translate into results that matter?

Recently, Phillips (*Phillips, 2003*) added a fifth level to the model that asks, (5) Was it worth it? Do results justify the investment?

Rossett (*Rossett, 2005a*) suggested a shift away from five-level evaluation that is predicated on being IN training or AT work, to assessment that is ongoing and merged with practice, as is the case with blended learning. Integrated evaluation, thus, asks questions about satisfaction, engagement, influence, practice, and value and it asks these questions continuously.

### *Measurement of BL is:*

- **Continuous and meaningful.** In the good old days, evaluation happened after class, typically by administering a survey that queries participants about satisfaction. With a blend, such questions happen often, for example, after an executive has completed 20 minutes with her coach or 15 minutes looking at recent research on a key topic. Was that useful? Would you recommend the experience to others? What other questions linger? How can we be more useful to you?
- **Transparent, diverse, and technology-based.** The use of technology for data collection provides training managers, line managers, executives, and employees themselves with continuous and ready access to data. Do I know how to answer that question? Did I demonstrate it? How am I doing with this material? Data can be collected using surveys, interviews, focus groups, observations done with performance checklists, review of work products, self-assessments, multiple choice or essay tests, simulations, bench work, automated tracking of progress or usage, and so on and so forth. Technology can play a part, through web-based forms, emails, short text messaging to wireless devices or cell phones, or online assessment with customized feedback built into learning modules and simulations. The technology systems help leaders know what their employees want to know, how they are faring, how much they are participating, the resources they are tapping, and how to be more helpful throughout the process.

### **What gets measured?**

What indicators will you use to look inside BL programs? Here are some options:

- **Enrollment and Completion.** What are the enrollment rates? Did employees complete a particular module, course, or series of courses? Did they take assessments and self-assessments? Enrollment and completion are germane where compliance and certification are concerned, but are less relevant in BL, because the learning and relationships are often ongoing and even informal. No matter the case, rely on assessments that ask participants to measure up against work-relevant performance standards.
- **Participation.** Because blending shifts control and decisions to employees, their choices reveal much about the health and success of the

program and assets. Which assets are chosen? Which ignored? How are various assets and activities being accessed and used? What do typical learning paths look like? How much do employees rely on the knowledge base to find answers? How often did they review portions of an online module, take the self-assessment, download a template, or examine a video example? How much time did they spend engaged in online communities or in conversations with their supervisors or an expert?

- **Reaction.** Are they pleased about the time spent on the blend? Which assets do they favor? Which do they ignore? While few will expect the blend to be a rollicking good time, employees must see good reasons to take an online class, chat with a coach, look at a database, self-assess, or check in with an online community. Are employees satisfied with the program and assets? What about coaches, experts, or supervisors? Do they enjoy their roles? Will employees continue to come back for more? Would they recommend it to their colleagues?
- **Learning.** Did employees earn a passing score for an entire course or sections of it? Can they demonstrate attainment of skills, retention, proficiency, and mastery through some type of authentic assessment? Does the learning and assessment combine to earn participants some form of recognition or certification?
- **Performance.** Are they handling work challenges differently? Better? Do outcomes reflect new skills and knowledge? Are they using what is taught in the blend? Do customers perceive a difference?
- **Business impact.** Why did the sponsors commit to the program? What indicators of success will they accept? Establish these answers and then seek relevant data throughout the effort.
- **Value.** Was it worth it for the organization? Was it worth it for the employee? Do the benefits realized from the program justify the costs in terms of money and time spent on development, implementation, and maintenance? Would the sponsor do it all over again?

### An example of how evaluation might work

Let's look at how we might approach measurement of a blend devoted to developing customer service specialists at a financial services company. Adriana, a retirement specialist, is glued to her desk, taking customer phone calls and using her computer to access customer records and blended assets. She and her colleagues are motivated to continuously develop their skills

<p>While on duty, Adriana receives a call from a customer with a question about his 401k account and his living will. Stumped by the particulars, she tells him she'll get back to him shortly with recommendations. First she searches a specialized database of retirement laws and tax codes, then an archived discussion board. Finally, she uses the "Ask the expert" directory to email a more experienced colleague. As part of a series of courses in a certification program, Adriana is assigned a personal coach and membership in a discussion group.</p> <p>The system tracks which resources she uses and how often, and asks, "Did you find this resource or activity useful? What questions remain?"</p>	<p><b>Participation and Reaction</b>  <i>We want to make sure specialists have convenient access to the most useful information, tools and resources possible. Therefore, we constantly look at what they are and are not using, and their opinions about how assets might be improved, so we can direct our efforts accordingly.</i></p>
<p>Whenever she can, Adriana practices on simulated customer scenarios that ask her to field customer questions, probe for clarification, make calculations, use online resources and then offer recommendations. Her efforts are compared to experts. She receives a score and suggestions about additional resources that will sharpen her performance.</p>	<p><b>Learning and Performance</b>  <i>People choose to work for us because we develop, support, and certify them. They are in charge of their own learning, but we want to help them make good choices about where to spend their time. We want to tell them what we expect and help them measure themselves and improve. We must ensure they are performing at our expectations, and those of the customers.</i></p>
<p>On an ongoing basis, Adriana's manager monitors a sampling of calls and suggests that Adriana enroll in a self-directed online module about compliance. The module begins with a pre-assessment in which Adriana listens to pre-recorded phone calls between customers and specialists and identifies errors. Based on her performance, the system creates a targeted learning path. Over the next month, she reads and studies online, attends a half-day instructor-led class, and receives a passing score on her second attempt at the post-assessment. The system records her completion of the module, her score, and sends an email notice to her and to her manager.</p>	<p><b>Enrollment and Completion</b>  <i>In our industry, we must comply with legal rules and regulations, so we have to make sure that anyone handling customer accounts is qualified.</i></p> <p><i>We are also interested in examining the quality of our modules and other assets. Do they result in skills and knowledge? If not, we must improve them.</i></p>
<p>Managers conduct customer satisfaction surveys on a regular basis, compare with participation in the BL program, and track the number of new and retained customers.</p>	<p><b>Business Impact and Value</b>  <i>Our line executives consider customer satisfaction the most important indicator, so we gather data on that, continuously.</i></p>

because tax laws and the company's portfolio of services are constantly changing, and also because they earn more as they acquire appropriate certifications. Their supervisors are supportive of the program and are themselves certified. For this situation, the Field Blend offers choices, freedom and practicality. Below is a description of how Adriana might experience the blend, and why these particular indicators were chosen.

## BL: bridging the classroom and workplace

Years ago, after teaching a seminar in a room in a hotel, one of the authors heard these words, "That was a great class, but..." The participant then offered a litany of concerns, starting with her manager and proceeding to lack of time, lack of fit with her job description, and the certainty that if she did this, it wouldn't elevate the measures on her performance review.

### Quicklist 4: I want to learn more about blended learning.

<i>I have a few hours</i>	<ul style="list-style-type: none"> <li>• AMA. (2004). <a href="#">Training for Today's Business Needs</a>.</li> <li>• Bersin, J. (2004). <a href="#">Blended Learning: Finding What Works</a>. Chief Learning Officer.</li> <li>• Brennan, M. (January 2004). <a href="#">Blended Learning and Business Change</a>. Chief Learning Officer.</li> <li>• Rossett, A., Douglas, F., &amp; Frazee, R. V. (2003). <a href="#">Strategies for Building Blended Learning</a>. Learning Circuits.</li> </ul>
<i>I have a day or so</i>	<ul style="list-style-type: none"> <li>• Check out <a href="#">ASTD</a>, <a href="#">eLearning Guild</a>, and <a href="#">Chief Learning Officer</a> for research, articles, and seminars.</li> <li>• Peruse articles on blended learning at the <a href="#">e-Learning Centre</a>.</li> <li>• Read articles and research related to business, learning, and results at <a href="#">IDC</a>.</li> <li>• Examine examples at Rossett, A., &amp; Frazee, R. V. (2003). <a href="#">E-learning Portfolio</a>.</li> </ul>
<i>I am ready to make a big commitment</i>	<ul style="list-style-type: none"> <li>• Bielawski, L., &amp; Metcalf, D. (2003). <i>Blended eLearning: Integrating Knowledge, Performance Support, and Online Learning</i>. HRD Press.</li> <li>• Bersin, J. (2004). <i>The Blended Learning Book: Best Practices, Proven Methodologies, and Lessons Learned</i>. Pfeiffer.</li> <li>• Bonk, C. J., &amp; Graham, C. R. (Eds.). (2005). <i>The Handbook of Blended Learning: Global Perspectives, Local Designs</i>. Pfeiffer.</li> <li>• Driscoll, M., &amp; Carliner, S. (2005). <i>Advanced Web-Based Training Strategies: Unlocking Instructionally Sound Online Learning</i>. John Wiley &amp; Sons.</li> <li>• Goldsmith, M., Morgan, H., &amp; Ogg, A.J. (2004). <i>Leading Organizational Learning: Harnessing the Power of Knowledge</i>. Jossey-Bass.</li> <li>• Lev, B. (2001). <i>Intangibles: Management, Measurement, and Reporting</i>. Washington, D.C.: Brookings Institution Press.</li> <li>• Masie, E. (Ed.). (2005). <i>Learning Rants, Raves, and Reflections</i>. Pfeiffer.</li> <li>• Piskurich, G. (Ed.). (2003). <i>The AMA Handbook of E-Learning: Effective Design, Implementation, and Technology Solutions</i>. NY: AMACOM.</li> <li>• Rossett A. (Ed.) (2002). <i>The ASTD e-learning Handbook: Best Practices, Strategies, and Case Studies for an Emerging Field</i>. NY: McGraw-Hill.</li> <li>• Rossett, A., &amp; Sheldon, K. (2001). <i>Beyond the Podium: Delivering Training and Performance to a Digital World</i>. Jossey-Bass/Pfeiffer.</li> <li>• Rothwell, W.J., Lindholm, J., &amp; Wallick, W.G. (2003). <i>What CEOs Expect From Corporate Training: Building Workplace Learning and Performance Initiatives That Advance Organizational Goals</i>. NY: AMACOM.</li> <li>• Schank, R. (2005). <i>Lessons in Learning, e-Learning, and Training: Perspectives and Guidance for the Enlightened Trainer</i>. Pfeiffer.</li> <li>• Tobin, D. R. (1997). <i>The Knowledge-Enabled organization: Moving from "Training" to "Learning" to Meet Business Goals</i>. New York, NY: AMACOM.</li> </ul>



**Dr. Allison Rossett**, long time Professor of Educational Technology at San Diego State University, is in the *Training* magazine HRD Hall of Fame and is a member of the ASTD International Board of Directors. Recipient of ASTD's 2002 award for her contributions to workplace learning and performance, Rossett edited *The ASTD E-Learning Handbook: Best Practices, Strategies, and Case Studies for an Emerging Field*. Rossett also wrote *Beyond the Podium: Delivering Training and Performance to a Digital World* and *First Things Fast: A Handbook for Performance Analysis*. Prior award-winning books are *Training Needs Assessment*, and *A Handbook of Job Aids*, currently undergoing revision. Some of Allison recent articles are "Moving Your Class Online," "Confessions of a Web Dropout," and "Training and Organizational Development, Siblings Separated at Birth." She has published articles on persistence in online learning, needs analysis, and performance support. Rossett's client list includes Microsoft, IBM, HP, the Getty Conservation Institute, Fidelity Investments, Deloitte Consulting, BP, the IRS, TSA, Amgen, Royal Bank of Scotland, and several elearning start-ups.

**Rebecca Vaughan Frazee**, has been working as an instructional designer and performance consultant for nearly a decade. She has managed several large-scale projects and designed f2f and technology-based solutions for national, global and Fortune 50 companies. Her work centers on the development of training and education professionals, helping them expand their focus beyond training to more systemic performance solutions, and supporting them in the move to performance consulting, e-learning and blended learning. She has taught graduate courses in educational technology and conducted workshops and presentations on project management, data analysis, needs assessment and performance improvement. Her recent publications include "Technology adoption: Bringing along the late-comers" in the *ASTD E-Learning Handbook*, "Using Relevance to Facilitate Online Participation in a Hybrid Course" in *EDUCAUSE Quarterly*, and "Begin with the end (user) in mind: Planning for the San Diego State University campus portal" in *Designing Portals: Opportunities and Challenges*. Rebecca's client list includes Motorola, Fidelity Investments, PricewaterhouseCoopers, Prudential Securities, Eli Lilly, TEC International, NASSCO, the Corporation for National Service, San Jose State University, and the IRS. She can be reached at [rebeccafranze@cox.net](mailto:rebeccafranze@cox.net).



## References

- AMA. (2004). Training for Today's Business Needs. Retrieved August 20, 2005, from <http://www.amanet.org>
- Bersin, J. (2004). Blended Learning: Finding What Works. Retrieved February 26, 2004, from the Chief Learning Officer website at [http://www.clomedia.com/content/templates/clo\\_feature.asp?articleid=357&zoneid=30](http://www.clomedia.com/content/templates/clo_feature.asp?articleid=357&zoneid=30)
- Brown, K. G. (2001). Using computers to deliver training: Which employees learn and why? *Personnel Psychology*, 54(2), 271-296.
- Clark, D. (2003). Blended Learning (White Paper). Retrieved August 20, 2005, from [http://www.epic.co.uk/content/resources/white\\_papers/blended.htm](http://www.epic.co.uk/content/resources/white_papers/blended.htm)
- CLO. (2005a). Industry News: Domino's Pizza Aims to Improve Retention with E-Learning. Retrieved August 1, 2005, from <http://www.clomedia.com/common/newscenter/newsdisplay.cfm?id=3970>
- CLO. (2005b). Industry News: eCornell Selects Richardson for Blended Training. Retrieved August 1, 2005, from <http://www.clomedia.com/common/newscenter/newsdisplay.cfm?id=4157>
- eTForecasts. (2005). PCs In-Use Surpassed 820M in 2004: PCs In-Use Will Top 1B in 2007. Retrieved August 20, 2005, from <http://www.etforecasts.com/pr/pr305.htm>
- Goodnoe, E. (2005, August 8). How To Use Wikis For Business, from <http://www.informationweek.com/story/showArticle.jhtml?articleID=167600331>
- Graham, C. R. (2005). Blended Learning Systems: Definition, Current Trends, and Future Directions. In C. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global Perspectives, local designs*.
- Graham, C. R., Allen, S., & Ure, D. (2003). Blended learning environments: A review of the research literature. Unpublished manuscript, Provo, UT.
- Gray, B. (2004). Informal Learning in an Online Community of Practice. *Journal Of Distance Education*, 19(1), 20-35.
- Kim, K.-J., Bonk, C. J., & Zeng, T. (2005). Surveying the future of workplace e-learning: the rise of blending, interactivity, and authentic learning, from <http://www.elearnmag.org/subpage.cfm?section=research&article=5-1>
- Kirkpatrick, D. (1998). *Evaluating training programs: The four levels* (2nd ed.). San Francisco, CA: Berrett-Koehler Publishers.
- Leonard, P. (2005). Blended learning provides efficient, effective, measureable learning. Retrieved August 1, 2005, from <http://www.amanet.org/blended/PatLeonardArticle.htm>
- Margaryan, A., Collis, B., & Cooke, A. (2004). Activity-based blended learning. *Human Resource Development International*, 7(2), 265-274.
- McGregor, J. (2004). It's a Blog World After All. Retrieved 81, from Fast Company at <http://www.fastcompany.com/magazine/81/blog.html>
- Modi, N. (2005). The Majority Of Global Internet Users Using A High-Speed Connection. Retrieved August 20, 2005, from <http://www.ipsos-na.com/news/pressrelease.cfm?id=2583>
- Neal, L. (2004). Predictions for 2004, from E-Learn Magazine at <http://www.elearnmag.org/subpage.cfm?section=opinion&article=39-1>
- Nelson, A. (2005). Deploying Media-rich Learning Systems. *CLO Magazine*, 4(5), 45-47.
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning systems: Definitions and directions. *Quarterly Review of Distance Education*, 4(3), 227-234.
- Phillips, J. (2003). *Return on Investment in Training and Performance Improvement*. Boston, MA: Butterworth-Heinemann.
- Pulichino, J. (2005). *The eLearning Guild: Metrics and Measurement 2005 Research Report*.
- Reigeluth, C. M., & Stein, E. S. (1983). The elaboration theory of instruction. In C. M. Reigeluth (Ed.), *Instructional design theories and models: An overview of their current status* (pp. 335-381). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rossett, A. (2005a). Are We Asking the Right Questions? Paper presented at The eLearning Guild Instructional Design Conference, Boston, Mass.

- Rossett, A. (2005b). Never Worry about Transfer Again—Seven Strategies for Converging Learning and Work. Paper presented at the International Society for Performance Improvement Annual Conference, Vancouver, British Columbia, Canada.
- Rossett, A., Douglas, F., & Frazee, R. V. (2003, July). Strategies for building blended learning, Learning Circuits. Retrieved August 1, 2004, from <http://www.learningcircuits.org/2003/jul2003/rossett.htm>
- Rossett, A., & Marino, G. (2005). If coaching is good, then e-coaching is... T+D, 59(11).
- Rossett, A., & Mohr, E. (2004). Performance support tools: where learning, work, and results converge: Einstein was an early performance support tool user. The U.S. Coast Guard uses PSTs. Time to get on board? T&D, 58(2).
- Rossett, A., & Schafer, L. (June 2003). What to do about e-dropouts: What if it's not the e-learning but the e-learner? T+D, 57(6), 40-46.
- Singh, H. (2003). Building Effective Blended Learning Programs. Educational Technology & Learning, 43, 51-54.
- Sparrow, S. (2004). Blended is Better. By: Sparrow, Stephanie. T+D, Nov 2004, Vol. 58 Issue 11, p 52, 4p;.
- Sullivan, J. (2005, July). World-Class Talent Development: How Learning Organizations Align Talent Development with Organizational Objectives, from [http://www.whitepaper.informationweek.com/shared/write/collateral/WTP/12970\\_44663\\_87636\\_wpaper\\_TalentDev.pdf?ksi=1061922&ksc=1222810955](http://www.whitepaper.informationweek.com/shared/write/collateral/WTP/12970_44663_87636_wpaper_TalentDev.pdf?ksi=1061922&ksc=1222810955)
- Thomson/NETg. (2003). Thomson Job Impact Study. Retrieved February 17, 2003, from [http://www.netg.com/Upload/uk\\_ThomsonJobImpactStudy.pdf](http://www.netg.com/Upload/uk_ThomsonJobImpactStudy.pdf)
- Whitney, K. (2005, August). Schneider Electric: Lighting Up the Performance Improvement Process. Workforce Performance Solutions, 1(3), 34-35, 56.
- Zenger, J., & Uehlein, C. (2001). Why blended will win. T + D, 55(8), 54-60.

### About American Management Association

American Management Association is the world's leading membership-based management development organization. Since 1923, it has provided valuable and practical action-oriented learning programs to business professionals at every stage of their careers. Each year, more than 500,000 AMA customers and members learn new skills and behaviors, gain more confidence, advance their careers, and contribute to the success of their organizations through a wide range of AMA seminars, conferences, and executive forums, as well as through AMA books and publications, research, online learning and self-study courses. For more information, visit [www.amanet.org](http://www.amanet.org)