
FOREWORDS

One unique feature of this handbook is that it contains two forewords. The foreword by Jay Cross, a thought leader in learning technology, performance improvement, and organizational culture, who coined the terms *e-learning* and *work flow learning*, reflects the corporate training aspects of this handbook. The second foreword, by Michael G. Moore, a pioneer in distance education and founder and editor of the *American Journal of Distance Education* among other accomplishments, is written from a higher education perspective.

Foreword

Jay Cross

When Curt Bonk asked me to contribute a chapter to this book, I flat out refused. As you might guess from the quantity of top-notch authors who appear here, Curt is persistent. He asked me again, and again I turned him down, this time with an explanation.

I told him I considered *blended learning* a useless concept. To my way of thinking, *blending* is new only to people who were foolish enough to think that delegating the entire training role to the computer was going to work. I could not imagine *unblended* learning. My first-grade teacher used a blend of storytelling, song, recitation, reading aloud, flash cards, puppetry, and corporal punishment.

Is it not nutty for a learning strategist to ask, “Why blend?” The more appropriate question is, “Why not blend?” Imagine an episode of *This Old House* asking, “Why should we use power tools? Hand tools can get the job done.” For both carpenters and learning professionals, the default behavior is using the right tools for the job.

My perspective is corporate, not academic. My bottom line is organizational performance, not individual enlightenment. Not that I am dismissive of research. In nearly thirty years in what we used to call the training business, I have read my share of Dewey, Kolb, Bransford, Gagné, Schank, and John Seely Brown, but as a businessman, I also pay allegiance to Peter Drucker, Stan Davis, and the *Harvard Business Review*. And I hobnob with least a dozen of the authors whose work you are about to read.

Here are a few issues for you to consider as you ponder this fine collection of observations and advice from learning pioneers around the globe.

What’s a Blend?

First of all, these are not useful blends:

- 40 percent online, 60 percent classroom
- 80 percent online, 20 percent face-to-face
- 80 percent workshop, 20 percent online reinforcement

After reading a few chapters of this book, you will see these for what they are: oversimplifications.

Four or five years ago, it was commonplace to hear, “We’ve tried e-learning. People didn’t like it. It didn’t work very well.” This is akin to saying, “I once read a book. It was difficult to understand. I’m not going to do that again.” The book in your hands describes rich variations and applications of e-learning. After reading it, you’ll find that you can no more generalize about e-learning than you can generalize about books. Consider this description of a blend from Macromedia’s Ellen Wagner (see Chapter Four, this volume):

Evolving blended learning models provide the essential methodological scaffolding needed to effectively combine face-to-face instruction, online instruction, and arrays of content objects and assets of all form factors. For example, in such a blended learning scenario, a student may find him or herself participating in a face-to-face class discussion; he or she may then log in and complete an online mastery exercise or two, then copy some

practice exercises to a PDA to take advantage of what David Metcalf calls “stolen moments for learning”—those times between classes or meetings, while on the train, or waiting for an appointment. Think about sending a text message with results of your practice sessions to someone in your virtual study group using your mobile phone—and getting a voice mail with feedback on your results when you arrive at the end of your flight.

People do not know what they like; they like what they know. For example, many assume that face-to-face instruction is the one best way to teach and that online learning is inherently inferior. They seek ways for online initiatives to support the high-grade face-to-face experience. Capella University turns this view on its head, asking what face-to-face support is required to supplement online learning. Having found online learning universally effective, Capella uses face-to-face only to further social goals such as building a support network or creating informal affinity groups. From its perspective, a blend may contain no face-to-face element at all.

Blended learning can take place while waiting in line at the grocery store or taking the bus home. Its ingredients may be courses, content chunks, instant messaging pings, blog feedback, or many other things. Interaction is the glue that holds all these pieces together. Interaction comes in many forms, not just learner and instructor, but also learner-to-content, learner-to-learner, and learner-to-infrastructure. Interaction can create an experience so compelling that it makes workers hungry to learn and drives otherwise sane people to pay four dollars for a cup of coffee at Starbucks.

What Goes into the Blend?

Great recipes are the product of generations of experimentation, tasting, and refinement. E-learning is at the same embryonic stage as American cuisine when home chefs rarely started a sauce without a can of condensed mushroom soup, and garlic was reserved for scaring away vampires.

First-generation e-learning initiated, delivered, and completed online; its consumers lost their appetites. Today’s tastier recipes include organizational skills assessments, books, content objects, workshops, clinics, seminars, simulations, collaboration, technical references, learning games, and links to communities of practice.

At the University of Phoenix, I developed a classroom-based business curriculum in 1976. A dozen years later, an online program debuted. More recently, the university introduced blended programs that combine some classroom and some online. Add more classroom, and the result is the “local model” blend; add

more online and the result is the “distance model.” Some blends are like “vibration cooking”: a pinch of this, a handful of that, and however much wine is left in the bottle. *C'est bricolage*.

IBM’s four-tier model shows how the ingredients of the blend must be matched to the nature of the outcomes sought. Web pages work fine for performance support. Simulations are good for developing understanding. Groups learn from community interaction and live virtual programs. Higher-order skills require coaching, role play, and perhaps face-to-face sessions. Each dish requires its own recipe.

Blends are more than a learning stew, for as the authors here amply demonstrate, blends fall along many dimensions (Figure F.1).

A Blend of Blends.

The ideal blend is a blend of blends. Take the last dimension in Figure F.1: formal to informal learning. Studies find that most corporate learning is informal. It’s unscheduled. It’s learning on the job. It’s trial-and-error. It’s asking someone who knows.

FIGURE F.1. DIMENSIONS OF THE BLENDED LEARNING STEW.

Fleeting know-how	--+---+---+---+---	Lasting knowledge
Individual	--+---+---+---+---	Community
Generic	--+---+---+---+---	Proprietary
Training	--+---+---+---+---	Knowledge sharing
Text	--+---+---+---+---	Visual
Self-directed	--+---+---+---+---	Guided navigation
Content focus	--+---+---+---+---	Experience focus
Exploring	--+---+---+---+---	Participating
Push	--+---+---+---+---	Pull
Personalized	--+---+---+---+---	One-size-fits-all
Skills	--+---+---+---+---	Values
Information	--+---+---+---+---	Transformation
Formal	--+---+---+---+---	Informal

If informal learning is so important, dare we leave it to chance? If we seek an optimal result, we cannot. Instead of a single blend that calls for x percent of this and y percent of that, I propose we take the blends of many of the authors here into account. We must replace one-dimensional thinking with simultaneous consideration of dozens of pie charts.

The many cooks of *The Handbook of Blended Learning* do not spoil the broth. On the contrary, their diversity of opinion and method enriches the book. Editors Curt Bonk and Charles Graham are to be congratulated for preserving the unique flavor contributed by each author.

Mike Wenger and Chuck Ferguson of Sun Microsystems make a strong argument for thinking in terms of a learning ecology instead of a blend of classroom and e-learning. “Classroom” deprives the concept of the rich, multifaceted experiences that take place there (see Chapter Six, this volume). Similarly, “e-learning” covers over the multiple possibilities born of the marriage of the learner and the Internet. There’s simply a lot more to it than that.

School’s Out

Corporations seek self-reliant workers they can trust to do the right thing without supervision. Every manager wants self-starters on her team. Yet when it comes to learning, many workers wait for others to tell them what to do. Why don’t they take matters into their own hands? I think it’s a vestige of schooling.

Several hundred years ago, compulsory schools were set up as a separate reality. Students were seedlings, while schools were the greenhouses to protect them from outside elements. The mission of schools was transmitting values and teaching a body of knowledge. The noise of the real world might taint the righteousness and clarity of the lessons.

Many of us equate learning with schooling. That is why we think of learning as something a person does in isolation and that its ideal delivery takes place in the classroom or the library, cloistered from the outside. Group work is by and large discouraged (it’s called “cheating”). Authorities choose the curriculum. Self-direction is viewed as rebellion.

People credit me with coining the term *e-learning*. I would never use the word in the executive suite. Why? Because senior managers too equate learning and schooling; they remember school as an inefficient way to learn. They are not willing to pay for it.

What Is Wrong with This Picture?

How many times have you seen a diagram of the learner-centric model that’s supposed to crowd out the instructor-centric model? It usually shows various learning

modalities (for example, content, the Web, discussion groups, videoconferencing, live help) arrayed around the worker.

The image is misleading. It implies that the learner is of paramount importance. In the corporation, the work of the group comes before the work of any individual. The learner-centric model retains vestiges of the classroom and its one-to-many oversimplification of how things really work.

There's an even larger problem: work is not part of the picture at all. Imagine a situation where a worker must respond in real time. Say there's an important customer asking about an order or something has gone haywire in the automated warehouse. Learning must be filtered through what is happening in the work environment. Otherwise the worker may accept the customer's order even though there's nothing in the warehouse to ship.

Blending Work Flow Learning

In the knowledge era, learning *is* the work. Harvey Singh's prescient chapter proposes the most important blend of all: the marriage of learning and work (see Chapter Thirty-Four, this volume). He describes self-perpetuating systems of continuous improvement. Smart software applies its awareness of conditions and context to take a hand in concocting the ever-changing blend. Cycle times shrink to the point that all business becomes a real-time activity.

The components of Harvey's work flow learning blend are:

- Portals and Web parts
- Internet and mobility
- Granular knowledge nuggets
- Collaboration
- Work flow automation and knowledge linking
- Human and automated virtual mentoring
- Presence awareness
- Simulations
- Business process and performance monitoring
- Continuous knowledge capture and feedback
- Real-time notification, aggregation, and decision support
- Integrated learning and enterprise applications
- Interoperable, reusable content framework

The End of Blend

So, given the breadth of choices, is it worthwhile to read a book about blended learning? Yes. As Elliott Masie says, "The magic is in the mix."

Blended is a transitory term. In time it will join *programmed instruction* and *transactional analysis* in the dustbin of has-beens. In the meantime, *blended* is a stepping-stone on the way to the future. It reminds us to look at learning challenges from many directions. It makes computer-only training look ridiculous. It drives us to pick the right tools to get the job done.

Enjoy the book. Don't just read it. Make it a *blended* learning experience. Discuss its cases with colleagues. Incorporate it into your plans. Reflect on how to apply its wisdom. Blending will help you learn.

Foreword

Michael G. Moore

Writing in 1886, William Rainey Harper (1886), the first president of the University of Chicago, declared: "The correspondence system would not, if it could, supplant oral instruction, or be regarded as its substitute. There is a field for each which the other cannot fill. Let each do its proper work." Always effusive in his enthusiasm for using printed text as a teaching medium, Harper went on to assert that "the student who has prepared a certain number of lessons in the correspondence school knows more of the subject treated in those lessons, and knows it better, than the student who has covered the same ground in the classroom" (Harper, 1971, p. 12).

The truth of this second of Harper's insights, that the quality of learning in a well-designed distance education program is often superior to that of the classroom, is now becoming more widely appreciated by a growing proportion of the population. What of the other assertion? Could correspondence, in its modern, online version, "supplant oral instruction"? Harper would not dare say so, but given the numerous research studies that show the effectiveness of distance learning, in an age when we have become accustomed to book our travel, mortgage our homes, and obtain our medicines online, it does not seem so unreasonable to consider the proposition that some educational programs, or at least components of such programs, might be accessed that way and be removed from the classroom in the interest of both the quality of learning as well as cost-effectiveness of teaching.

At last, it seems that the assumed superiority of classroom teaching, above all alternatives, a dogma that has been so pervasive for so long throughout academia, is beginning to give way to a more nuanced understanding of the suitability of non-classroom environments for formal study and the desirability of adding new forms of communications to enhance, and yes, sometimes to supplant, the professorial lecture. The emerging view is of a mutually respectful relationship between teaching at a distance and teaching in the classroom, and the idea that "each can do its proper

work” is now encapsulated in the concept of blended learning. Like distance education itself, under whatever name one prefers to call it, blended learning is a long-neglected idea whose time has arrived. Importantly, growing numbers of educators and influential policymakers are discovering not only the advantages but also the lack of threat in combining the advantages of teaching and learning in the two different environments: classroom and home or workplace.

It is by no means a new idea, however. You may be intrigued, as I was, to discover that blending classroom and mediated delivery of instruction at the high school level can be traced as far back as the 1920s, when it was known as “supervised correspondence study.” Started by an innovative school principal in Benton Harbour, Michigan, it was promoted by educators at the University of Nebraska to the extent that by 1930, it was a method used in more than a hundred public high schools across the nation and in 1932 was the subject of a national conference held in Cleveland Ohio.

In more recent history, as noted by authors in this handbook, blended learning was introduced in 1969 as a basic component of the teaching system of the world’s principal distance teaching institution, the United Kingdom’s Open University. When I was a tutor at the OU, I had the dual responsibility of providing instruction by correspondence to a cadre of distance learners based on their study of prescribed texts and video programs. At the same time, I had the responsibility of traveling to study centers and summer schools to meet these students in classrooms, to advise, discuss, and in other ways supplement the teaching materials designed by colleagues at the Open University’s central campus.

There is often misunderstanding among academics who have not had this kind of experience, voiced in their expression of concern that it might be demeaning or diminishing of one’s expertise to be a mere “facilitator” of learning content that has been chosen and organized by another person—or in the case of the Open University, by a team of other persons. In reality, in my experience and that of most others with whom I have discussed this, there is an enormous sense of freedom provided by the relief of not having to “cover” basic information or design the course structure, but instead being able to concentrate on interaction with individual students and engage in a creative interpretation with each individual or group, of the issues and subtleties lying within and beyond the previously determined content and instructional design. Essentially, blending the expertise of content and instructional design specialists with the facilitator’s skill at inducing knowledge creation is simply an application of the sensible principle of division of labor that is common to all professions. Perhaps more important, for the purposes of this book, it is one of the explanations that teaching and learning is so good in high-quality distance education institutions like the Open University and its analogues around the world.

At this point, I would like to insert a plea that readers, being interested in blended learning, should be sure to consolidate their understanding of its manifestation in the distance education context. Certainly one can, and should, study the concept from the point of view of the classroom teacher and the pedagogical theories underlying classroom practice. However, blending face-to-face teaching with those forms of teaching in which the principal delivery technology is *not* the classroom, but is a mechanical or electronic technology, that is, distance education, is so important that blended learning will not be fully understood if one's perspective is only that of the classroom teacher and does not include knowledge of research and practice in the distance education field. From my perspective, we have to rise above the limitations of American experience since in the United States, distance education has rarely included face-to-face tutorials. That is not universally the case however, as a single reading about study centers in, for example, the Indira Gandhi National Open University, would soon prove.

When I reflect on my own Open University tutoring experience and try to explain such views of distance education to American students or when I am a consultant and try to explain to a client the advantages of letting go of certain teaching responsibilities and outsourcing them to external specialists, the following is one of the ways I explain it. Begin by recognizing that each form of every communication medium and technology has distinctive qualities and also that students respond to these in different ways. It follows that a composite of two or more applications of these media or technologies is therefore likely to disseminate a message better than is possible by any one alone. In addition, it is important to provide more than one opportunity of satisfying each student's style of learning. (A medium is the form in which a message is communicated, for example, a still image; the technology is the vehicle that transports the medium, as, for example, a television, computer screen, or photo album.) Furthermore, recognize that technologies vary in cost of installation and maintenance, and media vary in cost of production and dissemination. It follows that responsible educational administrators and program designers have to face the difficult decision about which are the most cost-effective combinations of these media and technologies for their particular teaching purposes, and the decision taken in one case cannot be assumed to apply with equal validity in others.

In this argument, together with the technologies that deliver teaching materials by recorded and interactive audio, video, and text media, the teacher in a face-to-face classroom can be regarded as a communications technology, albeit an expensive one. The administrator's and designer's challenge is to know when to use this costly classroom technology and when to substitute an equally effective and less costly alternative. In higher education, this is a challenge that has more often than not been avoided, with administrators and faculty frequently failing

to select media and technology for good pedagogical reasons. In turn, correspondence, broadcasting, teleconferencing, and the Internet all have been employed for reasons other than because they had proven to be the most suitable form of communication for particular content, teaching process, or student characteristics. And so has the teacher-in-the-classroom.

The classroom is an ideal technology for achieving some learning outcomes, but for others it can be disastrously unsuitable. With the potential offered by alternative technologies to provide control of pace, redundancy in practice, multiple testing, access to alternative media, and a vast virtual library, I venture to suggest that there are many ways to provide a superior environment for all learning objectives that do not require spontaneous, person-to-person interaction. However, even readers who consider that view to be overly enthusiastic will concede that getting the right mixture of media and technologies that includes the right use of the classroom teacher in a well-designed integrated multimedia program is the most promising approach to obtaining both a high-quality learning experience, and, at the same time, the best return for dollars invested in the educational enterprise.

This *Handbook of Blended Learning* is strong evidence of this growing acceptance of this simple concept and strategy that advocates mixing the technologies of distance education and the classroom. It is also a unique source of information, stimulation, and encouragement for those who have not yet fully understood or accepted the importance of this concept.

It is not for me to introduce the authors and their themes. This has been ably done by the editors. However, I will venture to make just two short, general comments. First, with regard to the themes represented by the chapters in this book, I suggest that whereas the approach taken by many authors is to describe the effects and potential benefits of blending newer forms of computer-based technology with classroom teaching, beyond these immediate and local benefits are major policy issues—indeed, political issues—of great significance, whether considered at the institutional, national, or indeed global level.

In this brief foreword, I am not able to expand on, among other vital elements, the component movement toward creation and application of learning objects, but I want to at least underscore its importance. If one accepts the rationale for these developments and the underlying movement toward blended learning, one is, in fact, aligning with what I believe is an inexorable trend toward fundamental change not only in ancient concepts about teaching, learning, and the place of the academy in society, but in how society allocates the resources it invests in education—particularly, the relative apportionment of resources between people and hardware. Far more than the mere application of new hardware in the classroom, the ideas and practices represented by authors in this book lead,

at the minimum, to questions about what roles of teachers are worth paying for in the information age, what should be their relationship to students in an increasingly consumerist culture, what their rights and responsibility for ownership of content are, and what training, monitoring, and control will become the norm when teaching takes place in a blended system as compared with the privacy and monopoly of control that characterized the classroom of the past.

Beyond such changes in thinking about teaching, what is represented by this handbook is the expansion of a slowly growing political movement that anticipates strategic changes in how national and institutional resources are allocated for the educational enterprise and how they are managed. Questions are raised about public and private ownership of educational institutions and the changing responsibility and power of local administrators and managers in emerging large-scale systems. One of the core issues can be summarized as follows: given that certain teaching functions can be equally effective when provided through technologies outside the classroom, as the pressure for more cost-effective undergraduate education and also for adult lifelong learning continues to have an impact on the demand for the services of colleges and universities to be delivered in blended forms, institutional survival will depend on moving financial resources from a large labor pool of full-time faculty resident on campus to a greater proportion of the teaching load carried by communications technologies supported by part-time instructors.

In a competitive market, dominance will be achieved by those institutions that offer superior-quality products and services, and this requires higher dollar investment in a wide range of mediated programs as well as superior student support services. Within emerging, blended delivery systems, both campus-based (and extramural) faculty will find employment and satisfaction, not as the Jacks-and-Jills-of-all-trades, but in a variety of new specializations. Both the financial and technical resources as well as these changing human resources must be orchestrated by managers responding to pressures and opportunities that are quite different from those of the undergraduate residential subject-oriented university of the past. Increasingly specialization will characterize higher education institutions also, as each finds its comparative advantage, that is, what it can do better than others, and then offers its more narrowly chosen curriculum to a global constituency in an effort to recapture high investment costs.

I am tempted to refer for illustration to institutions and interinstitutional arrangements represented in this book, as well as to suprainstitutional arrangements (which I believe is the strategy that will press particularly hard on established institutions). However, resisting that temptation, I ask only that readers reflect on my suggestion that the contents of these chapters reflect a gathering movement with enormous policy implications as they go forward.

Finally, it has given me great personal satisfaction to discover so many old friends and distinguished colleagues among the chapter authors of this handbook, including Ellen Wagner, Alan Chute, Insung Jung, Randy Garrison, and Bob Wisher, to mention those who (as well as editor Curt Bonk) contributed to my own *Handbook of Distance Education* (Moore & Anderson, 2003). Perhaps even more pleasing when I first read the *Handbook of Blended Learning* was being introduced to a rich constellation of emerging leaders, new voices who are coming to address some of the same issues that have occupied distance educators, but from a fresh and powerful new perspective. That the editors have obtained contributions from such authors in so many different countries is especially impressive.

It may be argued that the United States retains its leading place in inventing and developing many of the computer-based communications technologies that underpin most of the developments talked about in this book. Still, there should be little doubt that it is to nations such as South Africa, South Korea, Mexico, and Malaysia, to mention only some of those that I have some personal knowledge of, that we should look to for ideas about resource allocation and examples of related national policies that could be of value to the United States as well as other nations. One need look no further than the use of study centers in the world's open universities referred to earlier, where millions of students have learned to study in a blended mode. I assume, of course, that policymakers and leaders of educational institutions will, before too many more years go by, be willing to hear and understand what is being reported, both domestically and internationally.

The *Handbook of Blended Learning* should prove to be a splendid contribution to this improved understanding. I commend it to readers, and I compliment the editors on their initiative in conceiving it as well as their fortitude in producing it.

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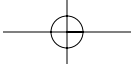
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technology, performance improvement, and organizational culture, he coined the terms *e-learning* and *work flow learning*. He is CEO of the eighteen-hundred-member Emergent Learning Forum. He is the author of *Implementing eLearning*, writes the "Effectiveness" column for *Chief Learning Officer* magazine, and is writing a book on informal learning.



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about distance education at University of Wisconsin-Madison, he helped plan the annual Wisconsin Distance Teaching and Learning Conference there. Moving to Penn State in 1986, where he is now professor of education, he founded the American Center for Study of Distance.



I thank all the wonderful people I have met in
blended learning environments and positions around
the world who have opened my eyes to many
exciting and significant global perspectives
with their local designs.

Curt Bonk

To family and friends and particularly to my wife, Dawn.
Charles Graham

