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White Paper

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Five Approaches to Blended Learning

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Abstract: To address instructional needs, organizations increasingly reach for blended learning solutions. Blended learning combines multiple delivery methods such as e-learning, instructor-led training (ILT), virtual teaming and reference manuals to address individual instructional problems. Unfortunately, best practices have been slow to emerge. Though blended learning is popular and continues to gain support, training managers and instructional designers struggle with the tactical demands of implementing a multi-faceted approach. More significantly, fundamental issues remain about when to choose blended learning at all. In this paper, we suggest that a primary reason organizations struggle with blended learning is that its definition is a moving target; numerous practitioner messages obfuscate rather than clarify blended learning meaning and use. Here we state our own definition of a blended solution, summarize existing literature, and reduce the hodgepodge of seemingly disconnected practitioner definitions and tactics to five primary approaches to blending.

Introduction

“Elliott Masie refers to a session he did via phone with PowerPoint slides he’d sent ahead as an example of technology-driven blended learning. As far back as 1996, Pete Weaver of DDI was evangelizing technology-driven blended learning through presentations titled ‘The Magic Is in the Mix.’ So, just what is all of the fuss about?” (Oakes, 2003: p. 17).

The fuss is simply that blended learning has gone mainstream within the training field. Only despite plenty of commentary on the subject and the mad urgency we feel to use blended learning *now*, instructional designers, training managers and others appear to have been left with the taxing job of trying to figure out what blended learning *is* exactly, how to make sense of various practitioner approaches, and apply blended learning within their organizations or client companies.

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This is the first in a series of blended learning-related papers by effectPerformance. We at effectPerformance see blended learning as a curriculum design strategy that organizations should consider when they want to address inter-related learning and performance needs. We define a blended learning solution as the intentional combination of instructional strategies, methods, media and delivery technologies. So what does blended learning look like? Consider the following example.

Blended Learning Example

Jen is a curriculum designer for an industrial manufacturer and is developing sales manager training. Her goal is to improve sales manager coaching skills. Coaching has several facets to it: knowledge of what to look for, knowledge of how to craft feedback, skill in delivering feedback, ability to interpret verbal and non-verbal signals, skill in diffusing conflict, etc. Jen analyzes the coaching needs of the sales managers and identifies a set of learning objectives. She then looks within her organization to see what already-existing training she can leverage. She identifies a popular off-the-shelf e-learning course, which addresses many of the knowledge components, but it does not provide enough opportunity to develop needed interpersonal skills. That course alone will not fully address the learning objectives. Jen brings in a vendor that specializes in management training to develop a custom instructor-led training course, which includes a variety of role play exercises to develop the interpersonal skills. In addition, she finds a number of intranet and Internet resources, such as articles, job aids, best practices, and case studies. She has her department's webmaster create a coaching resource site with links to all of the materials she has found.

When all of these training materials are ready, Jen conducts a web conference meeting with the sales managers, with support from their boss, to inform them of the training and to generate excitement about it. The sales managers complete the e-learning course, attend instructor-led training, and finally gain access to online resources. She conducts a follow-up meeting with the sales managers to gauge how the training was received and to identify additional needs.

Was the approach that Jen used a good example of blended learning? Are there alternative approaches to blended learning? Yes and yes. Blended learning is a broad umbrella... it includes a variety of approaches for developing blended solutions. Unfortunately, because blended learning is so broadly defined, it can sometimes be challenging to make sense of the research, case studies, perspectives, theories, and models proposed by researchers and practitioners. In writing this paper, we encountered that very problem.

Making Sense of Disconnected Ideas

As we reviewed the literature and consulted with colleagues, we found that no two people defined blended learning and its uses the same way, and so their advice was often conflicting and confusing. As you may have observed as well, definitions emphasize different aspects, for example:

Thought Leaders

Throughout this paper, we have sprinkled comments from published thought leaders, including:

- Josh Bersin — Principal, Bersin & Associates
- Donald Clark — CEO, EPIC Group
- Kevin Oakes — President, SumTotal, and Director, ASTD Chair Elect
- Allison Rossett — Professor, Educational Technology, San Diego State University
- Judith Smith — Online and Internet education solution provider
- Purnima Valiathan — Instructional specialist with the Nust Institute of Information Technology (NIIT)

- Combining Different Delivery Approaches —“a solution that combines several different delivery methods, such as collaboration software, Web-based courses, EPSS, and knowledge management practices.” (Valiathan, 2002: p. 1).
- Using Wide-ranging Tactics —“...a planned combination of approaches, such as coaching by a supervisor; participation in an online class; breakfast with colleagues; competency descriptions; reading on the beach; reference to a manual; collegial relationships; and participation in seminars, workshops, and online communities” (Rossett et. al, 2003: p. 1)
- Emphasizing Technology and Return on Investment (ROI) — Something where “...organizations are innovatively combining electronic delivery with other media to do more with less.” (Bersin, 2003: p. 1)

With perseverance, we were able to make some sense of blended learning and its many facets. In this paper, we summarize existing literature, identify several approaches to blending, and help you make sense of what can sometimes seem like a hodgepodge of disconnected ideas surrounding this very popular topic.

What Does the Research Say About Blended Learning?

Empirical research related to training curriculum design methods is sparse, and blended learning is no exception. Still, the few industry and academic studies we found that examined this method suggest that blended learning not only has popular support from practitioners but also has the potential to enhance learning and performance. The following summarizes the research we have uncovered.

A 2004 online survey of 268 learning professionals by the vendor Balance Learning Limited reported that “Blended learning is viewed as the most effective and efficient form of training,” (Sparrow, 2004: p. 52) with 77 percent of U.S. organizations currently using blended learning, and its use expected to increase by 2006 to nearly a third of all training options employed (Sparrow, 2004: p. 52). In 2003, Thomson NETg reported on a two-year study of 128 academic and corporate participants used to determine how blended learning impacted job performance (Thomson NETg, 2002: p. 9). They found that blended learning participants performed tasks significantly more quickly and more accurately than those who experienced e-learning alone or who received no training.

Peter Dean (2001), associate professor of management and leadership at The American College, found that providing several linked options for learners, in addition to classroom training, increased what they learned. DeLacey and Leonard (2002), of the Harvard Business School, reported that students not only learned more when online sessions were added to traditional courses, but also that student interaction and satisfaction improved as well.

Five Approaches

After reviewing articles and commentaries by a range of practitioners and after reflecting on our own experiences with clients, we removed a few outliers and identified five distinct approaches for designing blended learning solutions. In the following pages, we describe these five approaches, provide examples of each, and note possible benefits and limitations. Note that the approaches range from simple to complex, from narrowly

defined views of blended learning to holistic ones. All of them appear to be effective in their own way, within their own contexts and within their limitations.

Summary

The five approaches, described in greater detail on the pages that follow, are:

1. Stitching multiple media and technologies
2. Addressing individual learning styles
3. Using e-learning bookends
4. Integrating your blended strategy
5. Performance-based blending

Approach #1: Stitching Multiple Media and Technologies

The *Stitching* approach simply involves delivering related content using a variety of training media and delivery technologies. For example, we could choose to supplement an instructor-led training course with pre-work consisting of an online reading assignment, a video shown during class, a paper-based job aid given in class, and a posttest delivered online. The media and delivery technologies are often selected for their cost-benefit and ROI profile.

“What combination of tools and media will make the biggest impact for the lowest investment?...one company that we interviewed starts with job aids and moves to more expensive media only if the problem demands it. By thinking about every problem as a blending challenge, you can select the lowest cost media which solves the problem.” (Bersin, 2003: p. 1)

Criticisms of the Stitching Approach. Although this is a common approach, and has been around since before there was a field of practice called training, some

proponents of blended learning feel this is an overly simplistic approach and does *not*, in fact, constitute blending.

“There is a tendency to go with gut feel and slam some classroom training and e-learning together in a primitive manner. This has been called the ‘Velcro’ approach to blended learning, sticking things together rather than seriously blending or integrating them into a single learning experience or environment.” (Clark, 2003: p. 10)

“...confusion from the myriad of different and new technologies has kept most suppliers and training functions from truly maximizing the potential of this approach. Bluntly, most organizations haven’t matched the right delivery methods to learners’ needs.” (Oakes, 2003: p. 17)

Approach #2: Addressing Individual Learning Styles

The *Styles* approach is concerned with matching the right media and delivery technology with the individual’s learning style. With this approach, the same content is produced in multiple formats to appeal to learners who, for example, learn best by seeing, hearing or interacting with content, working alone or interacting with a group. To achieve this goal, an IRS tax guide might be produced as a web-based course, a print-based workbook, and a face-to-face seminar. Individuals who prefer the social interaction of instructor-led training may select the seminar. Others may prefer to read the workbook. Still others may prefer the online interactivity of a web-based course.

“The point of providing learning that works (*really* works, *and* benefits the association’s bottom line) is the learning that focuses on the best learning style for the association member. This is an important concept to grasp; it separates the programs that fail from those that are still going strong.... It is in the association’s (and the association learner’s) best interest to provide as many opportunities for the learner to ‘get’ to the educational content as possible – without breaking the bank, and in a way that the learner can absorb the new information without finding the learning experience onerous.” (Smith, 2001: p. 1)

There is an inherent redundancy to this approach, yet proponents believe that the benefit can be worth the additional costs.

“Redundancy is part of any good blend because it allows participants to receive the same and elaborated messages from several sources in various formats over time. For instance, a topic is discussed in a traditional classroom, it’s elaborated on in the online community, and actual examples are housed in the online knowledge database.” (Rossett, et. al, 2003: p. 6)

“Just about everybody needs to interact with content more than once in order to really understand and be able to use it.” (Oakes, 2003: p. 19)

Criticism of the Styles Approach. There is considerable research to support the notion that different people learn best under different conditions (Grabowski, & Jonassen, 1993). Some proponents of learning styles insist that blended learning provides an opportunity to optimize learning for individuals in an increasingly diverse workplace. However, there is little empirical support for the notion that providing the same instructional content in multiple media formats and delivery methods leads to significant learning and performance gains for the organization.

“Increasing choice is not an end in itself. Good cocktails are not normally made by including as many different drinks as you can muster. They are carefully crafted blends of complementary tastes, where the sum is greater than the parts. In some cases, as with whisky, a single malt is superior to the blend.... Offering many channels of delivery simultaneously can be expensive, involve high levels of duplication and result in learner confusion.” (Clark, 2003: p. 41)

Approach #3: Using e-learning Bookends

Using a *Bookend* approach is one of the more common strategies for blending media and technologies. In this approach, designers seek to reduce content presentation lectures that can make instructor-led training so lengthy and burdensome, and instead use an e-learning/instructor-led training/e-learning delivery sequence. As Valiathan points out, designers can also bookend in reverse by padding “self-paced learning material with instructor-led overview and closing sessions.” (Valiathan, 2002: p. 1)

But in the more typical sequence, designers offer learners e-learning online tutorial pre-work as a more hands-on approach for content presentation than instructor-led delivery. Next, they use instructor-led training. Here learners review content essentials, either in a much shortened format, or one which allows more time for the hands-on role play exercises and classroom projects that are generally especially effective as part of an instructor-led delivery. Another e-learning bookend on the back end assesses learning or provides supplemental information.

An important difference between using a bookend approach and stitching is that considerable thought needs to be put into blending the bookends with the middle elements in order to gain efficiencies. If there is no thought put into eliminating duplication, for example, then learner satisfaction and confidence in training will suffer. If there is no overlap among the various components, then learners will experience three disjointed learning experiences. The ideal bookend strategy strikes a balance between having overlap but avoiding duplication.

Criticism of the Bookend Approach. There is nothing wrong with the approach per se; however, critics of blended learning point to it as promoting a limited view of blended learning. There is a tendency to bookend as a cookie-cutter approach that ignores situational differences. Not every training need requires, or would benefit from, a bookend approach. Another criticism is that this approach ignores the wide variety of media and delivery technologies available, giving preference to e-learning and instructor-led training combinations. Rather than expand our use of instructional technologies, the approach promotes stagnation. This view is reflected in an eloquent statement by Roger Schank, Trump University CLO and Socratic Arts CEO, quoted in Clark (2003: p. 4):

“Blended learning seems to mean, if I understand it right, that there will be some e-learning and some classroom learning. It is in vogue for a simple reason. No one wants to spend that much on e-learning and people in general want to preserve what they have, so they have made up this nice name for not changing much and called it blended learning.”

Approach #4: Integrating Your Blended Strategy

“Options for blended learning go beyond the classroom” (Rossett, et. al, 2003: p. 1) and in order to tap the power of blended learning, designers need to think more broadly about training, media, and delivery technologies. The *Integrated* approach requires training designers to conceive to training as a cohesive strategy for addressing a learning that integrates multiple learning experiences over time. Delivery methods can include a wide variety of formats and encompass both formal and informal learning. If the Styles and Stitching approaches view blended learning as a salad bowl of media and delivery technologies and the Bookend approach is the equivalent of a grilled cheese sandwich, then the Integrated approach views blended learning as a melting pot in which a wide variety of ingredients are blended and served over time... much like a stew.

Multiple media and delivery platforms are seamlessly integrated into a learning progression that encompasses not only formal instructor-led, paper-based, and web-based training, but also informal training methods such as coaching, peer-mentoring, and job rotation. These methods broaden the list of delivery platforms to include email, chat, discussion boards, and other communication and collaboration technologies. A learning progression could start with a coaching session with your manager; proceed to independent learning assignments interspersed with more coaching sessions, take place in parallel with a collaborative project run with peers, and eventually transition to a

community of practice. To achieve proper integration of a learning progression over time, analysis and planning are musts.

“It’s common knowledge that most of what people learn for doing their jobs, they learn informally through over-the-cubicle conversations or by observation.... Technologies such as ‘ask the expert’ functionality, instant messaging, and threaded discussion enable workers to gain valuable insight from co-workers. This type of learning happens faster than formal learning and is usually more readily believable and accepted by the workforce.” (Oakes, 2003: p. 19)

Criticism of the Integrated Approach. One criticism of this approach is that it can yield overly-complex strategies that are difficult and costly to implement. Proponents counter that simply because the approach involves analyzing an organization’s specific needs and developing an optimal — rather than cookie-cutter — blend does not mean that the solution need be complex. A potential limitation in environments that do not support non-training interventions or do not have the people to address them is that when you begin to analyze a performance problem systemically, over time, you often find that knowledge and skill deficiencies are not at the root of the problem, or are not *solely* at the root. Proponents of Human Performance Technology argue that blending training with more training misses the boat entirely... that if anything, blending training with non-training interventions is the key to unlocking the potential of blended learning.

Ultimately we must blend formal and informal learning by breaking down the artificial barriers created between, for example, learning and knowledge management. The learning organisation 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: p. 6)

Approach #5: Performance-based Blending

Whereas the Integrated approach broadens blended learning to include informal as well as formal training methods, media, and technologies, the Performance approach

broadens further to address organizational needs with *non-training* methods. With this approach, the designer is free to pursue a robust systemic solution to a systemic problem. The solution could include formal training and informal training as well as performance improvement interventions such as documenting and re-engineering jobs and processes, aligning incentives, aligning goals, and providing adequate resources.

This approach recognizes the fact that most performance problems cannot be adequately addressed by training interventions alone. On the one hand, it frees designers from the traditional constraints of only being able to provide training solutions, making it more likely that designers can contribute to organizational success. On the other hand, it places a much greater burden of responsibility on the designer... a burden that many in the training realm do not have the skills or resources to address and have been reluctant to embrace, let alone accept. Nevertheless, some proponents view the Performance approach to blended learning as the full realization of its potential.

“A blend is an integrated strategy for delivering on promises about learning and performance. Blending involves a planned combination of approaches, such as coaching by a supervisor; participation in an online class; breakfast with colleagues; competency descriptions; reading on the beach; reference to a manual; collegial relationships; and participation in seminars, workshops, and online communities.” (Rossett et. al, 2003: p. 1)

“The success of knowledge workers depends on how quickly employees make decisions in the workplace. While part of the decision-making process is guided by common facts and working principles, people also need tacit knowledge that's often retained by experts...Because people absorb tacit knowledge by observing and interacting with experts on the job, activities may include a blend of online performance support tools with live mentoring.” (Valiathan, 2002: p. 4)

Conclusion

We at effectPerformance hope this paper has cast an illuminating light on blended learning and its use. Table 1 summarizes the five approaches we have presented. We

believe blended learning can be more than popular: when applied effectively, it can also be useful. In this paper, we have consolidated a spectrum of blended learning debate to five primary approaches. In our next paper, we describe the approach that effectPerformance designers use when we develop our own blended learning programs and curricula. It builds on, but differs from the five approaches presented here.

Table 1: Blended Learning Approaches

Approach	Description	Best Suited For...
1. Stitching	Combining different media and delivery technologies based on cost/benefit profile	Leveraging existing resources and minimizing costs
2. Styles	Matching the media and delivery technology with audience learning styles	Increasing participation in training and raising learner satisfaction
3. Bookend	Sequencing instruction such that e-learning comes before and after instructor-led training or such that instructor-led training comes before and after e-learning	Optimizing the time and investment involved with instructor-led training
4. Integrated	Develop a cohesive strategy for addressing a learning need that integrates multiple learning activities and involves both formal and informal learning	Developing mission-critical skills
5. Performance	Develop a cohesive strategy for addressing a performance need, leveraging not only formal and informal learning but also non-training performance improvement interventions	Addressing performance gaps

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