



THE SIX DISCIPLINES OF BREAKTHROUGH LEARNING

How to Turn Training and
Development into Business Results

THIRD EDITION

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The Six Disciplines are a business- and process-driven approach that complements and extends instructional design systems. The 6Ds provide a mnemonic for the rigor and thoroughness needed to extract maximum value from training and development. They have proven valuable in practice for reducing learning scrap and enhancing the business impact of learning interventions.

Introducing the 6Ds

The key themes of each of the Six Disciplines are briefly introduced below. In the remainder of the book, we devote a full chapter to each “D,” exploring it in depth and providing examples, tools, and recommendations to maximize its impact. You can read straight through from D1 to D6, or you can use the 6Ds Application Scorecard to identify which discipline offers the greatest opportunity for improvement in your organization and begin there.

Improving the practice of any one of the six disciplines will improve results; paying attention to all six will maximize the value that training delivers to your organization.



Define Business Outcomes

The First Discipline is to clearly and unambiguously define what the business expects to happen as a result of the learning intervention. The core concept is that learning is pursued in support of some organizational goal. The better the goal is understood, the easier it is to design an effective strategy (of which training may or may not be a part).

The fundamental logic of corporate-sponsored learning is that organizational value is created through people’s actions—serving customers, developing new products, managing projects, making sales, leading people, or any of the thousands of other activities that take place in even a modest-sized firm. The better that people perform these actions, the better the organization is able to fulfill its mission, whether that is making a profit, saving lives, or serving constituents.

Training employees to perform better and more efficiently is thus one aspect of an organization’s competitive strategy. An investment in learning is expected to pay returns in terms of improved performance, such as greater productivity, enhanced customer satisfaction, higher

quality, better retention, lower cost, and so forth. Every company-funded learning initiative—whether classroom-based, e-learning, on the job, social learning, coaching, tuition reimbursement, or anything else—is ultimately intended to serve a business purpose.

Thus, corporate-sponsored learning is simply a means to an end—improved performance (Figure I.2). Business managers are willing to invest time and resources in learning initiatives *so long as* they deliver demonstrably improved performance. If they do,

An investment in learning is expected to pay returns in terms of improved performance.

then learning and development is seen as a strategic asset; if they don't, then the training function is a drain on earnings and a target for reduction.

For that reason, the First Discipline (D1) of clearly **defining the business outcomes** for every learning initiative is the most critical and foundational. We do not mean *learning objectives*; we mean *objectives for on-the-job performance*. We do not question the value of learning objectives to guide instructional design. But we feel strongly that they are wholly inadequate to communicate the business rationale for the investment. Learning objectives define *what* people will *learn*, but not the *benefits* of doing so. They fail to answer the fundamental question that employees and business leaders are interested in:

- How will this initiative help me achieve my goals?

Learning objectives are written to explain what participants will *know* or be *able to do* at the *end of the program*. Business objectives for training, in contrast, specify what trainees *will do on the job* afterward and how that will *benefit the business*.

Getting clear about D1—the desired business outcomes—shifts the focus from learning to performance. It makes designing an effective intervention easier, assists in securing management buy-in, and is prerequisite to meaningfully documenting the results (D6). Perhaps most importantly, having clearly defined business outcomes allows training organizations to *win*: They can unambiguously demonstrate their value because they know what success means to the business.

Making the shift from learning to performance is not without its challenges. Surprisingly, some of the resistance comes from the business leaders themselves. That's because

Clearly defined business outcomes gives learning a chance to *win*.

many have become accustomed to thinking of training as a cure-all and something that you order the way you order a pizza. As a result, they may initially struggle to articulate the business rationale and may not welcome the realization that they have shared responsibility for the results.

Case in Point DI.2 Extending Learning at Emerson

When Terrence Donahue accepted the leadership of the Charles F. Knight Learning Center at Emerson, he knew he had big shoes to fill. The former director had been highly respected and greatly admired. The learning organization he had built—which is responsible for leadership training for Emerson worldwide—enjoyed strong support from management and an excellent reputation throughout the company. They embraced the importance of learning transfer. How could Terrence and his team build on those strengths and take learning to an even higher level of excellence?

They decided to use the 6Ds to strengthen their ties to the business, drive learning transfer, and ensure that training delivered business impact. They started spreading the idea of a new finish line: that a leadership development experience isn't finished until leaders have transferred and applied their new skills and knowledge. The Learning Center staff kept repeating the message about business outcomes and began including transfer and achievement phases in program plans and descriptions.

And the message began to stick. "The concept of the new finish line for learning has struck a resonant chord here and across our enterprise," Terrence told us. "A global manufacturing company like Emerson really understands the concept of manufacturing scrap, so the concept of learning scrap has hit some people like a thunderbolt."

For example, one of the business unit presidents recorded a video for all supervisors in his company, outlining his expectations of them to drive learning transfer and provide performance support and how he intended to hold them accountable for outcomes. In India, front-line supervisors attending *Leading at Emerson 2.0* are so excited about the implementation phase that they are calling their facilitators to share their successes.

In the company's 2015 Professional Development Learning Guide, the senior vice president for human resources, Michael Rohret, wrote: "We are making a significant investment in your future ... don't become a victim of 'learning scrap.' Attending a workshop and not applying what you learned is a wasted investment. To make sure your learning investments bring a return, we introduced a 'new finish line for learning' ..."

The chief financial officer, Frank Delaquila, embraced the concept immediately, so much so that he agreed to record a video "call to action" for the company's flagship program, *Leading at Emerson*. The video is shown about 90 minutes before the end of the workshop phase of the program. In it, the CFO congratulates participants and explains how the workshop is an investment Emerson has made in a foundation for their careers. He goes on to emphasize that "there is more work to do" if that investment is to pay dividends. "The value of the training will be measured by what you do with that foundation; that is, *what you put*

to work when you are back to work. The next twelve weeks are actually the most important part of the process.” Coming from the CFO of a \$25 billion global corporation, it’s a clear and unambiguous message that learning needs to be converted into action.

“The new finish line and all the components around it continue to receive very strong positive support from senior executives and front-line managers alike,” Terrence said. “It is a delightful situation for us to be in.”

It will require patience and perseverance to re-educate the organization to think in terms of business outcomes for training (Keeton, 2014). The payoff is worth the effort (Gregory & Akram, 2014). Training providers—whether internal or external—who have shifted from a focus on learning to a focus on performance enjoy much greater buy-in from management as well as from program participants (see Case in Point I.2). When employees can clearly see the relevance of the training, they are more willing to engage and more likely to answer “Yes, I will” when they return to work.

In the chapter on D1, we underscore the concept that training is a business function that must deliver business value. We provide a process and tools to guide a dialogue between business leaders and learning professionals to achieve alignment. We underscore the importance of “starting with why” and agreeing on the criteria for success *in advance*, and we provide a checklist and suggestions for practical application.

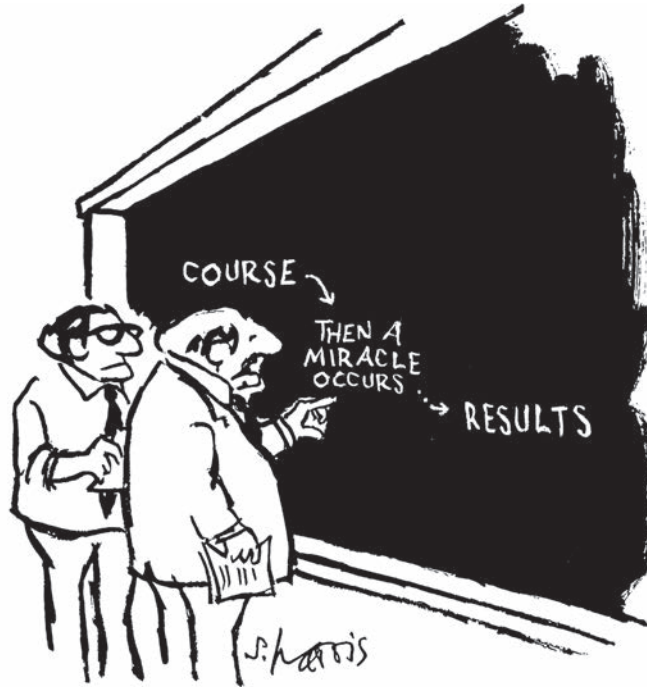


Design the Complete Experience

The Second Discipline practiced by the most effective learning and development organizations is that they **design the complete experience**, rather than just an “event.” The emphasis is on *complete*, which means actively planning and managing what happens before and after instruction with the same care historically afforded the instruction itself. The evidence is clear: the pre- and post-training environments profoundly impact the outcome (Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012).

Generating business value from learning is a *process*, not a one-off event. As Linda Hudson, chief executive of BAE, remarked in an interview with the *Wall Street Journal*, “You don’t go to class and next week, everything changes” (Lublin, 2014). To be effective, learning needs to be conceived and managed as a process, bringing to bear the tools of business process reengineering and continuous improvement. In today’s results-oriented

Figure I.8. TRAINING AND DEVELOPMENT NEEDS TO DESIGN THE COMPLETE EXPERIENCE, NOT JUST HOPE FOR A MIRACLE



"I think you should be more explicit here in step two."

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business climate, organizations need to be much more explicit and deliberate about the steps required to transform learning into results; it is no longer sufficient to just hope for a miracle (Figure I.8).

Managing something as a process requires taking into account *all* of the factors that affect the quality of the outcome. Process improvement involves identifying which elements are currently the weak links—the most common points of failure—and systematically addressing them. With respect to training and development, that means recognizing that learning itself is only one step in a chain of events leading to improved performance (Figure I.9).

Figure I.9. LEARNING IS ONLY ONE STEP IN THE PROCESS OF IMPROVING PERFORMANCE; NEW KNOWLEDGE AND SKILLS MUST BE TRANSFERRED TO THE WORKPLACE



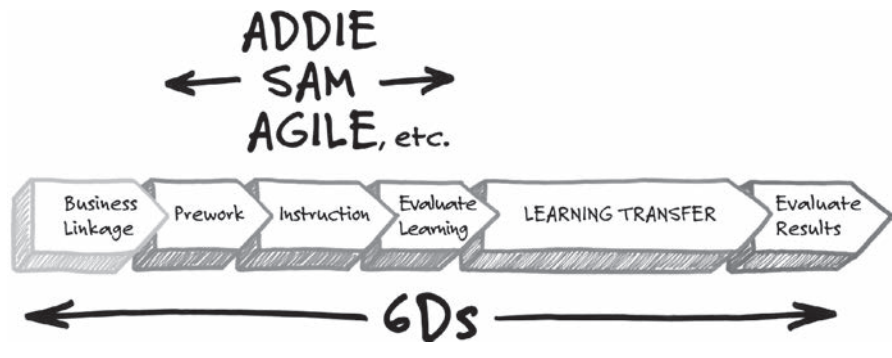
In any process, the quality of the end result is limited by the weakest link in the chain of value. Thus, a training program could produce outstanding learning, but still fail to create *value* if the process breaks down in the learning transfer step. In fact, that is frequently the case; learning transfer is far and away the most common point of failure in corporate learning initiatives, largely because it has usually been left to chance. Effective organizations recognize this and create structure, support, and accountability for this vital step.

Designing the *complete* experience (D2) recognizes that, from the participants' point of view, the learning experience is a continuum. It begins long before the planned instruction and continues long afterward. Participants learn what is actually expected of them from the actions of their managers and peers and from what the performance management system rewards. Unless these are in alignment with what is taught, training will have little impact on performance.

Traditional instructional design systems like ADDIE, and even proposed replacements like SAM (Allen & Sites, 2012), Agile (Islam, 2013), and LLAMA (Torrance, 2014) focus almost exclusively on “the course”—the period and method of planned instruction (Figure I.10). The unplanned learning, however—what happens before and after training, and therefore beyond the traditional scope of instruction design—is at least as important as the formal instruction in determining the eventual outcome. The “transfer climate,” in particular, that is, the culture and environment in which participants work, has a profound impact (Gilley & Hoekstra, 2003); indeed, the work environment can make or break the value of any learning initiative.

That isn't to say that high-quality instructional design isn't still essential, but it is to say, as long-time learning researcher Frank Nguyen admitted, “Because of my ID roots, it pains me to admit that instructional design

Figure I.10. THE 6DS EXTEND AND COMPLEMENT INSTRUCTION DESIGN SYSTEMS TO STRENGTHEN BUSINESS LINKAGE AND ON-THE-JOB RESULTS



frankly is not enough” (Nguyen, 2011, p. 54). The 6Ds complement and extend instructional design systems to ensure that learning creates business value (Figure I.10).

The Second Discipline seeks to optimize the learner’s total experience, not just what happens during instruction (live, virtual, electronic, or on the job). The practice of D2 expands workplace learning professionals’ roles and responsibilities in new, exciting, and challenging ways. Obviously, learning professionals do not *control* the learners’ work environment, but they can, and should, learn to influence it for their own, their learners,’ and their organizations’ benefit.

In the chapter on D2, we examine what the “complete experience” includes and which elements have the greatest potential to influence the answers to “Can I?” and “Will I?” and thus whether training creates value or

scrap. We suggest methods and provide tools to optimize outcomes, some of which challenge conventional thinking. We show that improving the transfer climate is a particularly rich opportunity for a breakthrough. We argue that learning organizations need to redefine “the finish line” for training; participants should be recognized for completing a program only after they have demonstrated application and improvement on the job. The real finish line of learning is improved performance.

Because training and development programs take time and cost money, everyone benefits when they are planned and managed in a way

The real finish line for learning is improved performance.

that maximizes the likelihood of success. Designing for the complete experience enables learning professionals to realize their full potential to deliver business value.

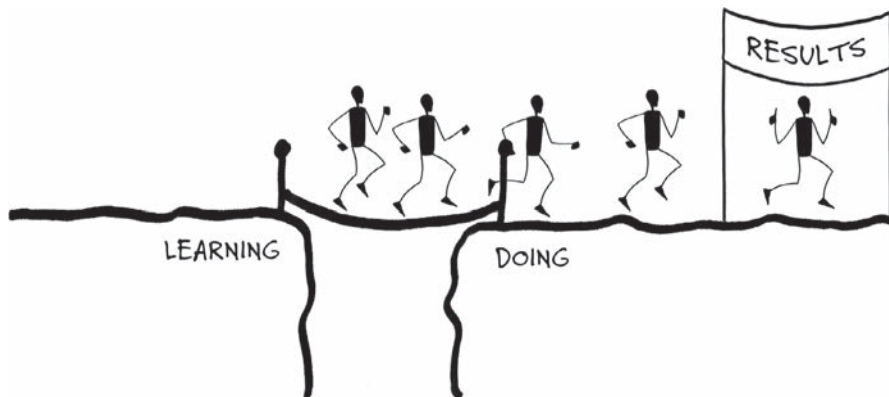


Deliver for Application

The Third Discipline that characterizes high-impact learning organizations is that they deliver learning in ways that facilitate its application. That is, they begin with the end in mind—what participants are supposed to *do* differently and better—and then consciously select learning strategies that help participants bridge the learning-doing gap (Figure I.11). They make sure that participants can answer the “Can I?” question in the affirmative back on the job.

The practice of **delivering for application** (D3) involves selecting instructional methods, technologies, and supporting strategies that facilitate learning transfer and on-the-job application. Its success depends to a great extent on how well the business objectives and requisite skills and behaviors have been defined in D1. Delivering for application requires, in addition, a sound understanding of how people—especially adults—learn. It includes the application of instructional design principles such as spaced learning, scaffolding, active engagement, preparation, reflection, elaborative rehearsal, and practice with feedback. As Julie

Figure I.11. THERE IS ALWAYS A GAP BETWEEN LEARNING AND DOING; THE PRACTICE OF D3 HELPS LEARNERS BRIDGE THAT GAP



Dirksen wisely wrote: “a great learning experience is not about the content, but is about the way the content is taught” (Dirksen, 2012, p. x).

Professionals who practice the Third Discipline (Deliver) are open to new ideas and approaches, but eschew uncritical implementation of learning fads. They heed Karl Kapp’s advice and select approaches best suited to achieve their goals, rather than what everyone else is doing at the moment:

A great learning experience is not about the content.

Organizations that match the learning needs to the right design achieve the most success ... focus on what these solutions can do for your organization. Don’t jump on the bandwagon just to be on the bandwagon.

Kapp, Blair, & Mesch, 2013, p. 17

The most effective learning providers appreciate that often “less is more”—that one of the most common problems in corporate learning is too much content in too little time. They are not wed to any one method or medium of instruction; they use a variety of techniques and approaches, depending on the nature of the topic, the audience, and the skills required. Because they are focused on delivering performance rather than training per se, they are willing to explore whether a good job aid or performance support system might suffice.

In Chapter 3, we review what makes learning memorable and actionable and leads to an affirmative response to the “Can I?” question. We also examine how the design and delivery of learning impacts the “Will I?” question, for example by making the relevance of the material clear and showing how each element is connected to real business issues. We provide tools and recommendations to map the chain of value and monitor the perception of the program’s utility.



Drive Learning Transfer

In any well-managed company, there are systems in place to set, measure, monitor, and reward the achievement of business objectives. Historically, however, there have been no similar mechanisms to ensure transfer of

learning, even in those programs in which participants are supposed to develop action plans. Participants, managers, and instructors have thus been conditioned to treat learning initiatives as one-time events. The widespread practice of awarding credit and certificates at the end of instruction sends entirely the wrong message. It implies “You’re done; no more is expected of you.” In fact, the real work—that of transferring the learning and using it to improve performance—only begins when the class ends.

“Talk to any group of laymen or professionals about what’s broken in the current learning and development process, and most will tell you it’s the lack of serious post-training

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the class ends.

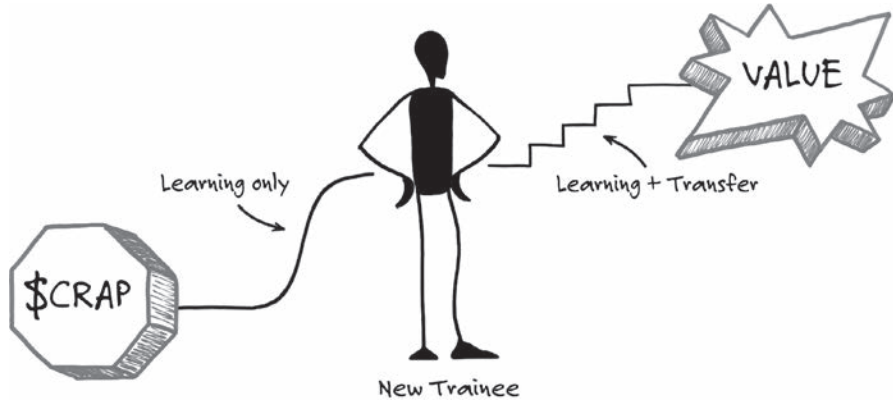
follow-through” (Zenger, Folkman, & Sherman, 2005, p. 30). It does not matter how much people enjoyed the training, how much they learned, or even how good their action plans are. Learning creates value only to the extent that it is transferred and applied to work, a relationship that can be expressed by the equation:

$$\text{Learning} \times \text{Transfer} = \text{Results}$$

Expressed this way, it is obvious that great learning is necessary to produce great results, but that, alone, it is insufficient. Even when the learning is a “ten out of ten,” if the transfer is zero, then the results will be zero. From a business leader’s perspective, “the training failed” if there is no change in performance. It doesn’t matter that the real breakdown actually occurred in the transfer step; the investment was wasted (Figure I.12) and training is blamed. For that reason, high-impact learning organizations practice D4; they put in place systems and processes to drive learning transfer back to the work of the enterprise. They do not leave it to chance or individual initiative.

The extent to which training is or is not transferred is determined by the *transfer climate*—the constellation of factors in the workplace that communicate to employees whether or not transfer is expected and supported. The transfer climate determines the answer to the “Will I?” question. While no single factor defines the transfer climate, a learner’s immediate supervisor has a very powerful influence. Thus, an important aspect of the practice of driving learning transfer (D4) is taking steps to ensure the active and effective engagement of managers in the transfer process.

Figure I.12. WITHOUT TRANSFER, LEARNING IS SCRAP; IT CONSUMES RESOURCES BUT PRODUCES NO VALUE



In the chapter on D4 we explain the elements that define the transfer climate and that determine the results that training ultimately delivers. We explain why great learning is not sufficient and why learning professionals need to take a leadership role in improving learning transfer. We provide case examples and practical advice on what you can do to improve transfer as well as a checklist and recommendations for action.

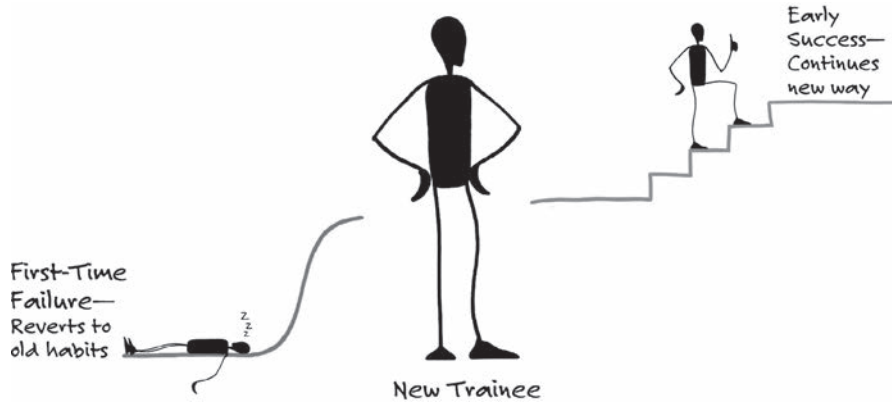


Deploy Performance Support

Trying something new always involves an element of risk. Whether employees make the effort to apply what they learned (do it the “new way”) or cling to old habits (Figure I.4) depends, in part, on whether or not performance support is available. Job aids, apps, help lines, coaches, and other forms of performance support increase employees’ confidence and the probability that they will attempt to apply newly learned skills on the job. Performance support also increases the probability of early success when they do—which encourages the continued effort needed to achieve proficiency (Figure I.13).

Companies that are serious about getting a return on their investment in learning and development practice the Fifth Discipline: they design performance support as an integral part of every learning initiative and they deploy of support both during and after instruction. The most effective

Figure I.13. LEARNERS WHO EXPERIENCE EARLY SUCCESS ARE MOTIVATED TO CONTINUE; THOSE WHO EXPERIENCE EARLY FAILURE ARE LIKELY TO GIVE UP



organizations work with senior leaders to develop a culture in which everyone understands that they have a responsibility to support learning. They “put their money where their mouths are” by reallocating some of their learning resources from pure instruction to performance support.

In the chapter on D5, we draw an analogy between product support and performance support. Consumer product companies understand that high-quality support is vital to customer satisfaction; we argue that this is also true for learning. We explore the characteristics of great performance support and the times at which it is most valuable. We stress the importance of providing support to the participant’s manager as well, since he or she has a profound impact on outcomes. We include practical advice for designing and deploying effective performance support, a checklist for D5, and recommendations for action.



Document Results

In today’s hypercompetitive global business climate, no company can afford to waste resources, especially its human capital. Every investment must ultimately be judged in terms of its contribution to the organization’s

mission and success. Leaders have a fiduciary responsibility to invest their company's resources—time, people, and money—in ways that are most likely to secure its long-term success. To do so, they need reliable data with which to weigh the merit of various initiatives so that they can revise or replace those that fall short of expectations.

The investment in learning is no exception. The bottom-line questions that must be answered about any learning and development initiative are:

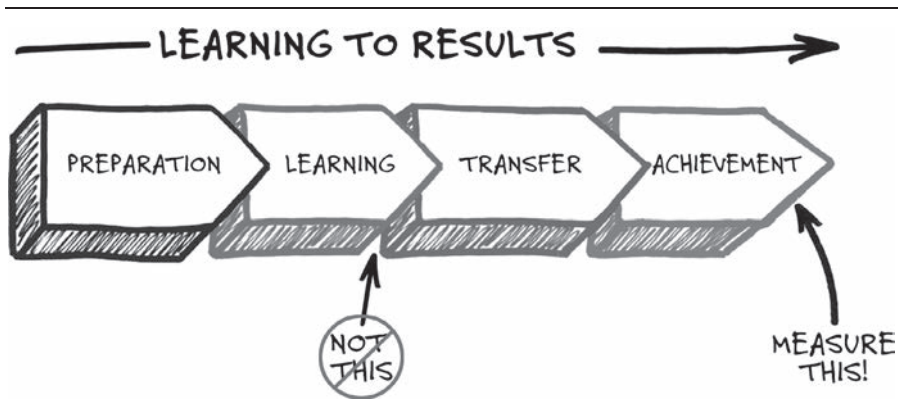
- Did it achieve the results for which it was designed?
- Was it worth it?

Workplace learning professionals must be prepared to answer those questions. To justify the investment, leaders need to see the impact on performance, not just the level of learning activity (Figure I.14).

Therefore, the Sixth Discipline practiced by the most-effective learning organizations is to document results in a manner that informs decisions about future investment and that facilitates continuous improvement. Documented results must be:

- *Relevant.* That is, they must directly assess the behaviors or results for which the program was created in the first place. It is not enough to measure activity, satisfaction, or even learning. You must measure the outcomes the program was designed to deliver.

Figure I.14. WHAT THE BUSINESS REALLY WANTS TO KNOW IS WHETHER THE LEARNING HELPED IMPROVE PERFORMANCE



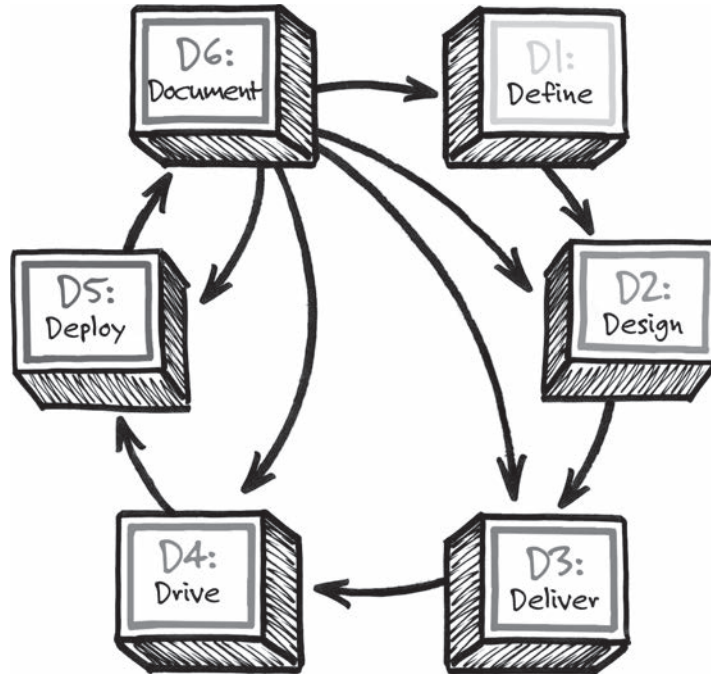
- *Credible.* The data you present and the way in which they were generated must be credible—that is, believed and trusted by the stakeholders. If they do not believe your data, they will not believe your conclusions and will not implement your recommendations.
- *Compelling.* The results must be significant enough and presented in an interesting enough way to persuade stakeholders to take action to continue the program, expand it, revamp it, or abandon it.
- *Efficient.* The evaluation should not cost more than the value of the decision it is meant to inform. Efficiency only matters, however, if the first three criteria have been satisfied. Obtaining the wrong information quickly and inexpensively is *not* efficient.

Finally, measurement is prerequisite to improvement. Companies must continuously improve the effectiveness and efficiency of their business processes—including learning and development—to stay competitive. But continuous improvement is impossible without relevant data about which activities are adding value and where the process is breaking down. The rigorous practice of documenting results (D6) is essential to support a cycle of continuous learning, innovation, adaptation, and improvement. The results of one program should become the raw material for the next cycle of defining outcomes, designing experiences, delivering, driving, deploying, and documenting (Figure I.15). A never-ending cycle of reinvention and renewal ensures that corporate education keeps pace with the changing competitive environment, workforce, and business needs. Training departments should be models of continuous improvement.

Training departments should be models of continuous improvement.

In the chapter on D6, we discuss why learning and development must document results. We differentiate between the metrics needed to manage the learning process—activity, costs, learners’ reactions, and amount learned—and what the business really wants to know: Did performance improve? (Figure I.14). We provide guiding principles for program evaluation and advice on what to measure, how to collect and analyze the information, and, no less important, how to market the results.

Figure I.15. THE RESULTS OF ONE ITERATION SHOULD BE USED TO INFORM THE DESIGN, DELIVERY, SUPPORT, AND ASSESSMENT OF THE NEXT

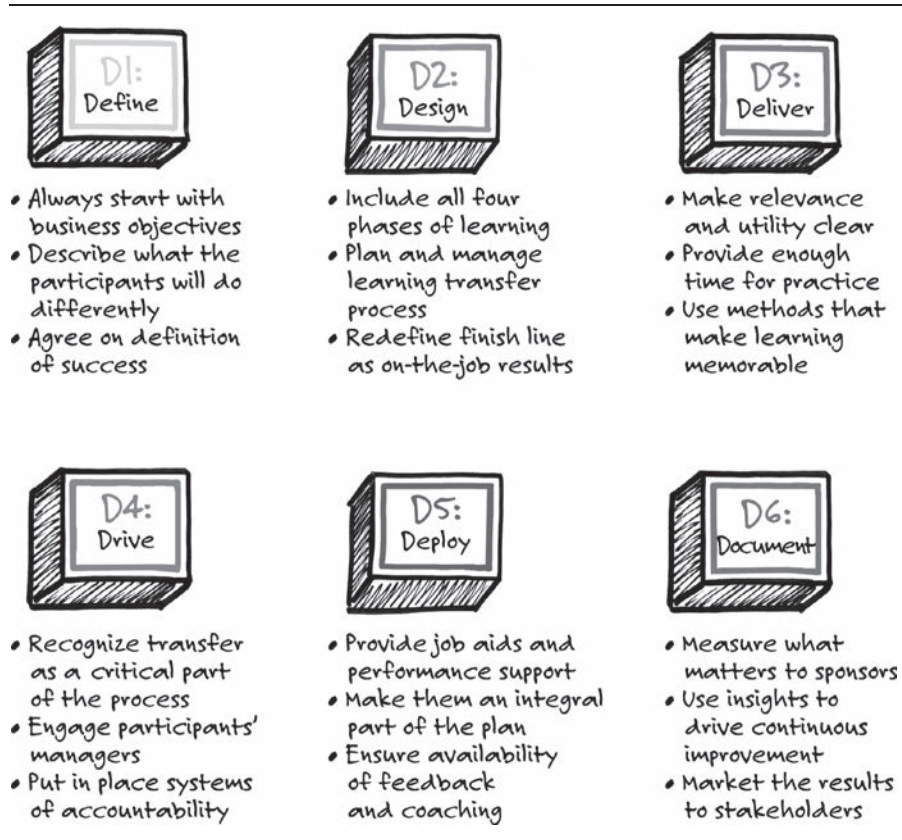


Summary

Companies invest in learning in order to enhance the value and effectiveness of their human capital and, therefore, their ability to achieve their objectives. Management has a fiduciary and ethical responsibility to ensure that such investments produce a return in terms of improved performance and competitiveness.

We have identified Six Disciplines—the 6Ds[®]—that characterize high-value, breakthrough learning and development initiatives. Organizations that have adopted and practiced the 6Ds have increased the contribution that learning makes to their companies' success. As a result,

Figure I.16. THE SIX DISCIPLINES



they enjoy greater recognition and support from the business (Pollock, Jefferson, & Wick, 2014).

In preparing this edition and *The Field Guide to the 6Ds*, we solicited examples from readers and professionals who had attended our 6Ds workshops. Learning leaders around the globe generously shared their ideas, successes, and advice. Our experience has renewed our optimism about people, learning, and organizations. We are convinced that we are at the beginning of a true renaissance in corporate education. We are confident that you will extend these principles and will achieve even greater successes.

We look forward to hearing your story.