

From Fluency-Based Instruction to Accomplishment-Based Performance Improvement¹

Carl Binder

INTRODUCTION

This is an evolutionary history that recounts how the author began as a student with B.F. Skinner focused on accelerating behavior frequency (rate of response), and over more than four decades developed a user-friendly approach to performance improvement informed by the work of Thomas F. Gilbert (1978) and inspired in part by the operating philosophy of Steve Jobs. It reflects an evolution from basic science to performance engineering, from instruction to systemic performance improvement, and from academic vocabulary to user-tested plain English labels on simple visual models. The approach, rather than being an “open source” academic field of study, has emerged in the form of packaged programs of instruction, job aids, and coaching that can be introduced in any organization, with virtually any function or department, at any level – from front-line contributor to CEO.

This is also a story of contributions by a host of thought leaders and mentors, scientists and practitioners, consultants and methodologists to an evolutionary stream that has developed, and continues to develop, by means of the usual principles: *variation* and *selection*.

A PERSONAL HISTORY

The author began his career in behavior science, fortuitously and with a remarkable series of events, as one of B.F. Skinner’s last graduate students in the Harvard Department of Experimental Psychology. For more details about this history, refer to Binder (2014) in a collection of professional biographies published by the Cambridge Center for Behavioral Studies.

After several semesters of independent study with Skinner, an introduction to Joseph R. Cautela, then a prominent figure in the field of Behavior Therapy, led to B.H. Barrett, whose pioneering laboratory and classroom for institutional residents with severe disabilities provided a perfect venue for basic research and application of Skinner’s variable, rate of response, with humans. Barrett had completed postdoctoral training with Skinner and Ogden Lindsley in their lab at the Metropolitan State Hospital and Harvard Medical School, where she extended the methods of free operant conditioning in laboratory studies, and turned from the Skinner-Lindsley focus on adult psychotic and normal subjects to learners with severe disabilities, including children in and out of the institution (Barrett, 1977).

After I had conducted basic laboratory research with institutional residents for several years, Barrett asked me to transform her pioneering behavioral classroom for institutionalized

learners from a discrete trial programmed instruction methodology to one applying O.R. Lindley's new tool, then called the standard behavior chart (Pennypacker, Koenig, & Lindsley, 1972). The power of Skinner's variable – rate of response – combined with a standard visual display on Lindsley's chart enabled us to make discoveries that would have been impossible using percent correct measures and trials-based programmed instruction. We developed instructional strategies and created curriculum sequences that contributed to the early development of Precision Teaching. The work that began in Barrett's lab and continued beyond in teacher training, consulting, and evangelism, under the tutelage of Barrett, Lindsley, and Eric Haughton, has been documented in a widely read paper (Binder, 1996) on the evolution of what became known as *behavioral fluency* and the practice of fluency-based instruction.

By the late 1970s, those in the field of behavioral education, which included Precision Teaching as well as Siegfried Engelmann's Direct Instruction programs and methodology (Binder, 1988, 1990a, 1991; Binder & Watkins, 1989, 1990), were becoming frustrated with their inability to penetrate the educational establishment. Watkin's (1988, 1997) analysis of the contingencies that determine the adoption of educational materials and programs in regular education made clear that non-behavioral professors of education, who train teachers, write textbooks, develop or guide curriculum, and consult with schools had a lock on public education. This was perhaps a first inkling that we would need to take a more *systemic* approach to change management if we wanted our methods and discoveries to be adopted outside of a small sub-community of applied behavior scientists. Leaders in behavioral instruction, including Ogden Lindsley and Henry Pennypacker, who were ABA Presidents in successive years at that time, encouraged their proteges and members of the broader behavior science community to "go private" – to create commercial offerings from our applications, expose ourselves to selection based on the "contingencies of the marketplace," and thereby increase the likelihood that we would adapt to and thrive in the natural environment of a market economy (Pennypacker, 1986).

As an extension of this push into commercial applications, Lindsley strongly encouraged me to move from educational research and teacher training to find business applications of what we had learned from Precision Teaching and fluency-based instruction. After establishing my first consulting firm (Precision Teaching & Management Systems, Inc.), and subsequently learning about sales, marketing, business, and a host of factors in this new market for our work, while promoting the value of behavioral fluency in the business training market (Binder, 1990b, 1999, 2003), my colleagues and I developed and promoted fluency-based instruction and coaching programs for sales, customer service, and other working professionals (Binder, 1987; Binder & Bloom, 1989; Binder & Sweeney, 2002). The addition of a fluency-building (or rate-building) practice phase to conventional training dramatically accelerated results. Introduction of practice aimed at achieving behavioral fluency, plus a focus on core fundamentals rather than including nice-to-know, typically cut training time by a factor of 2 or 3 and achieved productivity levels on the job that were considerably higher than what was achieved with conventional training and coaching methods that rely on percent correct measurement without taking the time dimension (with rate of response) into account.

However, on-the-job results occurred *only* if learners actually *used* practice routines that involved self-management and self-measurement on the job; and *only* if other factors in the workplace prompted, provided tools, and delivered feedback and reinforcing consequences for using new methods, procedures, skills and knowledge. Arranging contingencies beyond conventional "spray and pray" training was not always easy in the face of business-as-usual for training departments. But optimizing impact required us as consultants to plan and work with clients to implement conditions that would support performance on the job, after training. This almost always involved ensuring that leaders, managers, and supporting departments

	<i>S^o</i> <i>Information</i>	<i>R</i> <i>Response</i>	<i>S_r</i> <i>Motivation</i>
<i>E</i> <i>Environmental</i> <i>support</i>	(Data) ①	(Instruments) ②	(Incentives) ③
<i>P</i> <i>Behavior</i> <i>repertory</i>	(Knowledge) ④	(Capacity) ⑤	(Motives) ⑥

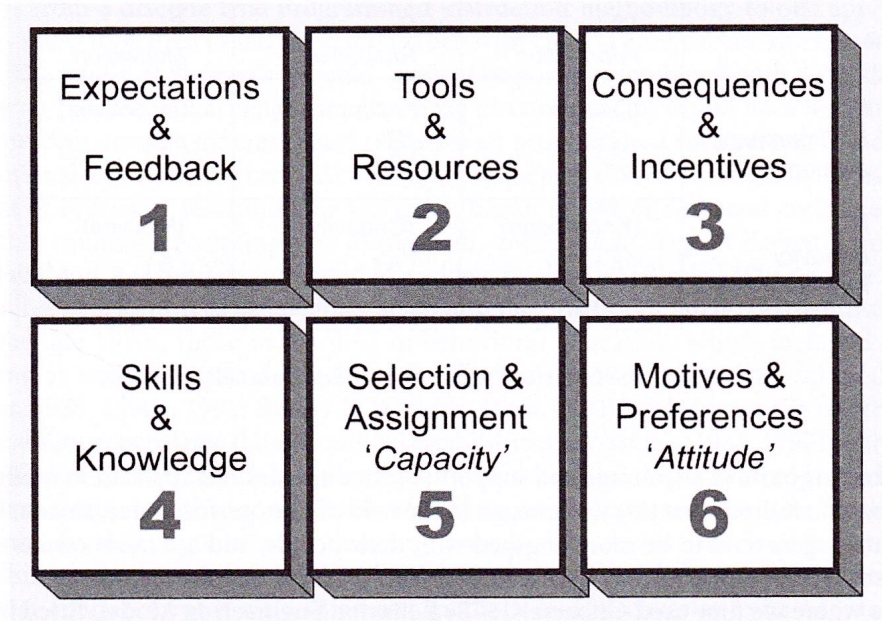
FIGURE 4.1 The Behavior Engineering Model (from Gilbert, 1978).

would do their parts to encourage and support practice and desired application on the job. It was perhaps fortuitous that this work began in the field of sales performance, since sales leaders and managers tend to be more engaged with their people, and are more results-focused than in some other areas of corporate management, training, and development.

This is where we first used Gilbert’s (1978) Behavior Engineering Model. Eric Haughton (1972), one of the pioneers and my personal mentor in the development of Precision Teaching methods and curriculum, had worked at Harvard’s Office of Programmed Instruction when Skinner and his colleagues were first developing teaching machines and programs. He met Tom Gilbert while the latter was doing postdoctoral work with Skinner. When Gilbert’s (1978) groundbreaking book, *Human Competence*, came out, Haughton had gifted me with a copy, but I had not paid close attention to it until the early 1980s when we were first introducing fluency-based instruction and coaching in banks and other organizations. At that point, Gilbert’s Behavior Engineering Model provided a perfect framework for my consulting teams to use for planning with clients how to support self-managed practice and application of new skills and knowledge on the job.

Our work developing and implementing training programs fit the *Knowledge* cell of Gilbert’s model. Our fluency-based practice procedures dramatically accelerated new learners toward true mastery. However, in the absence of variables identified in the top three cells of the Behavior Engineering (*Data*, *Instruments*, and *Incentives*) arranged in the work environment, we could not be sure that trainees would practice daily on their own, measure their own performance and work toward fluency goals. Moreover, once on the job, we could not ensure that, for example, newly trained salespeople would actively engage prospective customers in discussions about new products they had practiced to sell, but instead might revert to old habits in the work environment. The Behavior Engineering Model gave those in our consulting teams a tool for designing implementation plans that would optimize return on investment in fluency-based training and practice methods.

However, as we began to engage clients as partners in program roll-outs, we found that the language of Gilbert’s model was often confusing, limiting, and likely to produce errors of application. *Data*, for example, could be understood in many ways, and often our clients would wonder aloud if we were speaking about databases or spreadsheets, charts or graphs. We would explain that sometimes quantitative data can be helpful in setting goals and providing feedback, but that the *Data* cell in Gilbert’s model could extend far beyond its label in the conventional sense to include qualitative information to set expectations, corrective feedback, and other forms of information. Similarly, *Instruments* was confusing to people. They asked if it meant some kind of physical instrument, like an ohm meter, or perhaps a personality profiling tool. *Incentives* prompted people to ask about consequences of which people are



© The Performance Thinking Network

FIGURE 4.2 The Six Boxes® Model.

unaware before they occur, for example, unintended consequences. What about skills? Is that included in the *Knowledge* cell? And so forth.

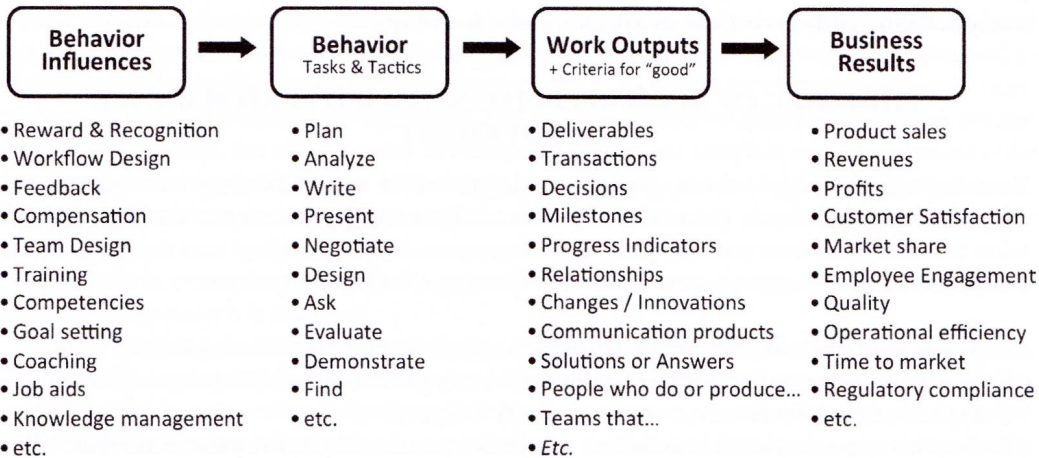
I and my colleagues began in the mid-1980s to try different language with clients, and to test various words and phrases for labeling the cells of the model. This continued until I found a language that people could initially understand, apply the concepts as intended, and make fewer errors that we needed to correct. By the late 1980s, we had arrived at the labels we now use in our version of the model. We always referred to Gilbert (1978) when describing the origins of our model, but because the language had changed significantly we were not clear about what we should call it. Finally, a client named Tom Hogan, who was Vice President of Sales Training at Dun and Bradstreet, said, “You’re always talking about those boxes. Why don’t you just call it the Six Boxes Model?” We took his advice (Binder, 1998) and subsequently formally named our model the Six Boxes Model, eventually registering its name as a trademark.

For at least a decade, while working with sales, marketing, customer service, manufacturing, and other functions in organizations around the globe, we used the Six Boxes Model, taught it to our clients, and made many presentations that included the model at conferences and corporate meetings. The name of the model spread widely, and was even mistakenly used to refer to Gilbert’s model and other variants or descendants of it (Binder, 2019). Using plain English was a communication strategy we had learned from Ogden Lindsley (1971), who developed plain English equivalents for terms from the experimental analysis of behavior when he first worked with special education teachers. User-testing was something we adopted by studying the early work of Steve Jobs, at Lindsley’s suggestion in the late 1970s, because Jobs had focused on user experience and *simplicity* (Segall, 2013) in his creation of the Apple II computer. The Apple II was accessible for ordinary people rather than only for nerdy computer hobbyists, and represented an enormous shift from complicated configurations of technology to products that are easy to use for virtually anyone.

EVOLUTION OF PERFORMANCE THINKING® MODELS AND METHODS

As we continued to apply what we learned from Gilbert (1978) through his book and for several years in an informal mentoring relationship, we recognized that the most important aspect of his work was the insistence on a paradigm shift from a focus by leaders, managers, trainers, and performance professionals on *behavior* and behavioral objectives to focus on the valuable products of behavior, what Gilbert called *accomplishments*. Another important influence on our evolution toward an easy-to-use accomplishment-based approach was Joe Harless, a protégé and one-time business partner of Gilbert. Harless led a successful performance consulting and training company for decades, later deciding to focus on training instructional designers and performance consultants in methods that anchor performance analysis to accomplishments. Mentored by Harless (1975, 1987) and his packaged programs, we began to see the power of an accomplishment-based approach, and during the late 1990s we developed a simplified model called the *Performance Chain* to depict the elements of performance.

Following what we had learned about the usability of plain English terminology and testing it to minimize initial category errors, we changed the word *accomplishment* to *work output* for two reasons. First, most dictionary definitions of *accomplishment* refer to either behavior or ability, not to the products of behavior. Second, many of our colleagues in the fields of performance improvement and organizational behavior management, although claiming to follow Gilbert’s lead by focusing on accomplishments, often used the terms *outcomes*, *results*, and *accomplishments* more or less interchangeably and with varying meanings. Sometimes they referred to organization-level results. Other times they referred to changes in behavior (often using passive voice nouns, as in “procedure completed”). And often they failed to name specific things, or nouns, that one might *produce* with behavior. We found that the phrase *work outputs* produced fewer initial errors in our training programs for performance consultants, and by carefully defining it in the beginning we were able to teach its use to avoid errors or lack of clarity about the valuable products of behavior.



© The Performance Thinking Network

FIGURE 4.3 The Performance Chain.

After years of including these two models (the Six Boxes Model and the Performance Chain) in presentations at conferences and in work with clients, we realized that many of our clients and colleagues appreciated the simplicity and plain language of our models. We saw that the plain English language and simple visual models often spread “virally” across organizations, and that we could nurture that diffusion to expand verbal communities of use. We discovered, in short, that our models and language provided an effective communication framework, not merely a technical vocabulary.

In about 2005 we decided to create a series of programs to teach people how to use these models. We re-named our consulting firm, then called Binder Riha Associates, to be The Performance Thinking Network, because we saw that the easy communication fostered by our models and language provided a foundation for creating verbal communities, networks of users who could learn with and from one another using a shared language. Our clients told us that we not only gave them a set of models and tools for improving performance, but that we were teaching them “a new way of thinking” about performance. We shifted from referring to our methodology as the *Six Boxes® Approach* to using and trademarking the term *Performance Thinking®* to brand our methods, tools, programs (Binder, 2019), and our Company.

One of the more important developments in this work involved precise definitions of terms to optimize the flexibility of application while ensuring technical consistency. This statement may, at first, seem inherently contradictory since a focus on precision could conceivably limit application. On the contrary, once we had crystal clear language guidelines for “good” descriptions of business results, work outputs, criteria, behavior, and behavior influences, we found that we could apply these guidelines while maintaining precision across an enormous range of applications and users. Perhaps more importantly, insisting on precise descriptions of elements of performance defined by our two models (e.g., that descriptions of work outputs include countable nouns and no verbs, not even passive verbs) makes it more likely that individuals and teams from widely varying disciplines and functions will communicate with one another effectively. When executives, staff performance professionals, middle managers, and individual contributors all use labels and terminology in the ways that our guidelines specify, then communication and effective collaboration across the enterprise is more likely. We highlight this problem, and solution, with a metaphor from the Bible story about the Tower of Babel (Binder, 2009a). When language differs, communication and collaboration become difficult, if not impossible. With consistent language, people can work more effectively and efficiently across the usual silos and sub-groups.

THE LOGIC OF ACCOMPLISHMENT-BASED PERFORMANCE IMPROVEMENT

Teaching others to apply this approach, we defined what we call *performance improvement logic*. A flexible approach, there is nonetheless a sequential dependency in the steps that one takes to arrive at an intervention, plan, or performance design. One first uses the Performance Chain model to deconstruct performance, following a series of questions:

1. What is at stake for the organization? (business or organizational results)
2. What are the actual or desired accomplishments produced by performers as individuals, teams, or contributors in a process? (work outputs)
3. To what organizational or business results does each accomplishment contribute? (link from work outputs to business results)
4. What characteristics of each work output define a “good” instance of that work output? (criteria for a “good one”)
5. What tasks and tactics are needed to produce desired work outputs at the highest level? (behavior)

Once having defined performance using the Performance Chain, we then turn to behavior influences, framed by the Six Boxes Model. We ask a series of questions about behavior influences affecting the behavior needed to produce each accomplishment:

1. What behavior influences in each cell of the Six Boxes Model currently enable and obstruct desired behavior needed to produce the work output? (Analyze)
2. What improvements might we make in behavior influences, based on what we learn from successful performers, from evidence-based practice, or from other sources? (Brainstorm)
3. What combination of behavior influences should we ultimately configure as our best guess at what will optimize desired behavior and work outputs? (Choose)

Once we choose behavior influences, we implement our plan, measure performance, and iterate until we achieve optimal results. The Performance Chain provides a guide for what we can measure: business results, work outputs, and/or behavior (Binder, 2009b).

This “logic” is straightforward and relatively easy to teach, although it is not always easy to apply, since performance in organizations can be complex, and conducting analyses of actual or desired performance may not be simple. Nonetheless, we have found very few individuals in any function or at any level of an organization unable to learn and apply this approach in at least a rudimentary way. Some organizations that have adopted this approach, such as one of the largest global biotechnology firms, support hundreds of performance consultants in facilities around the globe who apply this approach to huge, multi-year projects. Other organizations have trained hundreds of front-line managers who use this approach to coach and continuously develop the performance of their people.

THE POWER OF BEING ACCOMPLISHMENT-BASED

Most people, independent of their background, find it challenging to make the shift from a focus on behavior to a focus on accomplishments during analysis and description of performance. We once thought that this was because many of those with whom we work had backgrounds in training or, in some cases, in behavior science, and consequently were accustomed to focusing on behavior, creating behavioral objectives, and so on. We have concluded after several decades, however, that we humans are more accustomed to observing, discussing, and trying to influence our own behavior and that of others, while we are not so accustomed to identifying the valuable *products* of behavior, except in the most concrete examples. Accomplishments such as decisions, relationships, and recommendations, particularly if they are not concrete and visible, are often harder to recognize than more tangible accomplishments like documents or widgets. Thus, one of the biggest obstacles in the initial learning process is to eliminate verbs when describing accomplishments while focusing on what we call “countable nouns.”

Once a focus on accomplishments becomes routine with users, the power of an accomplishment-based approach is obvious.

First, by focusing on the valuable products of behavior, and linking them to business results, we draw a “line of sight” from the behavior of people to results for the organization that they serve “through” their accomplishments. This is one reason we sometimes use the term *contributions* when referring to people’s accomplishments. As Gilbert (1978) pointed out repeatedly, accomplishments are *valuable* while behavior is *costly*. An accomplishment-based approach focuses everyone on the value delivered.

Second, when we pinpoint valuable accomplishments, it is easier to identify the behavior needed to produce them. Particularly if we observe and interview exemplary performers – those who consistently deliver desired accomplishments at higher levels of productivity or

quality than average – we can discover specific tasks and tactics that deliver accomplishments most efficiently. This is in contrast to competencies or other abstractions describing categories of behavior, which are not specific enough to pinpoint, measure, or manage if we choose to follow a natural science approach to measurement.

Finally, when we define job titles, processes, or team contributions by listing the accomplishments they produce, we can more precisely set expectations for what a particular job title contributes, measure performance more easily by counting work outputs that do and do not meet criteria, and provide feedback based on whether behavior produces desired accomplishments or not. Anchoring performance analysis in accomplishments rather than in behavior per se offers these advantages, and more.

USERS AND APPLICATIONS OF PERFORMANCE THINKING® MODELS AND METHODS

One of the benefits of using plain English and simple visual models is that it makes our methodology accessible for anyone who might have an interest in understanding or improving performance, no matter their education, their level in the organization, or their function. We have enabled high-school-educated employees working on production lines in small manufacturing organizations to help improve performance in the processes to which they contribute. We've enabled CEOs to better understand their own performance in the form of their major accomplishments, and that of their teams, to adjust priorities and to implement new strategies and tactics. The majority of users of this approach are either "performance professionals" in Training, Quality, Human Resources, Organizational Development, or other departments who seek to improve their impact on performance; or leaders and managers responsible for the performance of their direct reports, teams, departments, and business units. Early in the development of Performance Thinking programs, we created various matrices of Users x Applications to better understand and define the potential scope of application and to guide the development of programs and tools.

With ease of communication and instruction supported by simple visual models and plain English, we could vary the tools offered to different users for different programs, and create program modules to teach different users how to produce accomplishments of value to them (e.g., program design documents for performance consultants, agreed-upon-action steps for managers and their direct reports, strategy execution plans for senior leaders). This led to tools and guidelines for approaching five distinctly different types of performance opportunities, where specific applications might represent one of these types or a combination of them. The five types of performance opportunities are:

1. Defining and supporting the performance of an individual, role or team.
2. Defining and supporting performance in a process.
3. Ensuring that training is applied on the job and that performance sustains.
4. Implementing or managing change for a program, system, process, etc.
5. Defining and strengthening the practice of organizational values.

We use these categories, especially with performance consultants, to help them "frame" projects and know how and where to look for work outputs as they conduct performance analyses.

CLIENT EXAMPLES

While few of our clients will allow us to use their names or to share their data, the following examples are real client stories about the evolution and impact of Performance Thinking® programs and applications in different organizations.

Applications of the Performance Thinking® Methodology for Different Types of Users

Users Applications	Executives & Leaders	Middle Managers	Front Line Managers Supervisors Team Leaders	Staff Professionals (Training, OD, HR, Process, etc.)	Individual Contributors
Organizational or Team Alignment	X	X	X	X	
Implementation Planning	X	X	X	X	
Strategy Execution	X	X			
Employee Engagement Planning	X	X	X	X	
Best Practices Documentation & Continuous Improvement	X	X		X	
Performance Needs/Opportunity Analysis	X	X		X	
Performance Design / Training Support		X	X	X	
Management or Supervisor Development	X	X		X	
Leadership Development	X	X	X		
Performance Consulting				X	
Performance Problem-Solving	X	X	X	X	X
Process & Quality Improvement/Management	X	X	X (Lean teams)	X	X
Career Self-Development	X	X	X	X	X
Specialized Applications	X	X	X	X	X
Performance Coaching	X	X	X	X	X
Executive Performance Coaching	X			X	
Agile Talent Development	X	X	X	X	X
Job Descriptions/Requirements & Hiring / Succession	X	X	X	X	X

FIGURE 4.4 A Users X Applications matrix for performance thinking applications.

From Training to Performance Consulting at a Biotechnology Firm

The organization with the longest continuous use of Performance Thinking programs is a major biotech firm with facilities around the globe. In 2009 we trained the first performance professionals from their Operations Learning and Performance group, an organization that delivers training and non-training performance interventions to factories worldwide. Starting with a small team of about a dozen learning and development professionals, the leader of that group began a multi-year effort to spread Performance Thinking models and language like a virus. After he became certified to teach the *Six Boxes® Practitioner Program* and to provide ongoing project coaching of performance consultants certified in that program, he and his colleagues worked to deliver valuable results to internal clients, one project at a time. They collected and communicated success stories from projects that they undertook, and slowly became a recognized resource within the organization for addressing performance improvement and implementation opportunities, not merely providing training. The leader continued to certify Six Boxes Practitioners, licensing our program for delivery to his company's employees, and built teams of performance consultants in facilities around the world. By the time he retired, he had sufficiently impressed senior executives with results of projects that some occasionally used the language of Performance Thinking, and Six Boxes Performance Thinking had become a *de facto* standard for performance improvement in the Company.

A seasoned member of the group succeeded the first leader, and was charged with expanding and strengthening the community of practice. She became certified to deliver the program, and to date coordinates and supports nearly 300 Six Boxes Practitioners, both within Learning and Performance and in other organizations, including Sales, and Research and Development. Each year she drives initiatives to strengthen the sharing of results and methods, working with clients to sustain and continuously improve impact over time, and building fluency in applying the models and methodology to allow scaling of applications from small "quick hits" to multi-year implementation and change management projects. Performance Thinking methods have come together with a specialized error reduction methodology used in factories to ensure quality. Currently, the position of this group is strong, illustrated by confident statements to stakeholders that "this just works," and the message that if stakeholders are unable or unwilling to engage fully in the process, the group has sufficient standing in the organization, and so much demand on their time, that they can occasionally refuse project requests when stakeholders are not ready to fully engage.

Performance Thinking for Organizational Development

Another organization, in the health insurance industry, with a strong organizational development orientation, approached us to develop a team of performance consultants. They viewed the models and language of Performance Thinking as vehicles for building a shared understanding of performance and a culture and vocabulary across the organization that could make continuous performance improvement more likely. After completing a program to certify a dozen Six Boxes Practitioners, they continued working with The Performance Thinking Network for a year, with ongoing support and coaching for high visibility and important projects, and with various interventions designed to bring stakeholders – the performance consultants' clients – into the shared perspective based on the models and language of Performance Thinking. They also conducted a series of projects designed to improve their own processes and performance in work with clients (Gilbert et al., 2014). By the time their Company was acquired by a larger organization, there was a seasoned team of performance consultants, many of whose internal clients had become partners in performance improvement with a shared vocabulary and understanding of performance that enabled them to work more closely together.

The Performance Thinking® Manager at an ABA Organization

A rapidly growing organization in the Applied Behavior Analysis/Autism field sought to develop their managers and leaders with a Performance Thinking approach. Certifying one staff member to facilitate a program for managers, and several internal program coaches to help managers apply what they learned after completing the program, the organization developed several 100 managers using our programs. The focus on accomplishments, or work outputs, underlying this program led to the organization's creating job descriptions built around major work outputs rather than competencies or more traditional descriptions of performance. They use these job descriptions to drive performance management and coaching.

After observing the impact of management and coaching based on work outputs, the CEO requested assistance from The Performance Thinking Network to develop a list of work outputs to support measurement by the Board of Directors of her performance. This was an early example in our work of defining the jobs of senior executives based on their work outputs. This led has led to our developing an entirely new approach to Executive Performance Coaching that helps senior leaders clarify their work outputs, some of which often do not make it onto the "radar screen" of executive evaluation or self-management, but which exert significant leverage on performance across the organization. Accomplishments such as key *relationships* that leaders establish and maintain, *decisions* or *approvals* of various kinds that are part of budgeting, hiring, and strategic planning processes, and *recommendations* or *directives* they pass on to their teams often fill much of senior leaders' time but can go almost unnoticed as they occur in the context of meetings and conversations. With all of the major work outputs of a leader on paper, the leaders themselves can better decide how to allocate their time, what work outputs they might be able to delegate to others, and how their contributions influence the performance of those who report to them, etc.

In many organizations that adopt our approach, we see discoveries and insights that would probably not have occurred without the language and models of Performance Thinking. In addition to the operational impact of better management and performance improvement, these insights can lead to new and innovative approaches to human resource management, leadership development, measurement, and implementation planning.

Building a Performance Coaching Culture

A Senior Vice President of Talent Management and Chief Culture Officer, who had introduced our Six Boxes Practitioner Program to build a team of performance consultants in another organization, decided to adopt *Six Boxes® Performance Coaching* at a software company in the medical field. After certifying training and development staff to deliver the program, plus a few program coaches to support application on the job by program participants, the organization has trained around 500 managers, with roughly 1500 more to come. While implementation across the organization has been inconsistent due to differing levels of support from business unit leaders and managers, in groups where all managers complete the program and a senior leader is supportive, Performance Thinking models and vocabulary have been seen as "changing the conversation" about performance and how to improve it. While the Company is still in a multi-year process of rolling out the program, the goal is to use it as a foundation for creating a management and leadership culture focused on accomplishments and on agreed-upon action steps between managers and their direct reports for continuous performance improvement and career development.

In an interview with the author, the SVP who introduced the program said how pleased she is to hear managers and their teams discussing performance with the shared language of Performance Thinking. She recounted how often she, as a senior leader, finds herself sketching

and labeling the Performance Chain and Six Boxes models on whiteboards in meetings with individuals and groups to guide conversations about operational challenges and performance improvement opportunities. When asked what she would say about this approach to her C-level colleagues, she said, “If aligning your people with business results is an important goal of yours, then Performance Thinking is a strategic imperative.”

These examples illustrate what can happen in organizations that adopt the 21 plain English words and two simple visual models as a framework for teaching leaders, managers, staff professionals, and individual contributors how to analyze performance and configure plans for improving it at the organizational or individual level. This work is still very much an experiment in progress. But to date, the impact is quite gratifying. It’s important to note that in the corporate human resources and development arena, where many companies adopt new programs and approaches every few years, Performance Thinking has so far proven to be sustainable, with some organizations maintaining their commitment and continuing to develop their internal capabilities for 5–10 years. We also see individuals returning to The Performance Thinking Network’s annual Summer Institute year after year, based on the impact this approach has had in their organizations and their own professional development.

ALIGNING WITH TRENDS AND ISSUES IS THE PERFORMANCE IMPROVEMENT MARKETPLACE

The evolution of Performance Thinking models and programs continues, and is now on the cusp of scaling to more companies around the world and to larger implementations. In the process, we are aligning with or “riding the tail” of several trends that have been visible in the human resource development and performance improvement markets in recent years.

Agile Talent Development

The term *agile* is being applied to many different types of activities and functions in organizations these days. Emerging from the software development field, where iterative development and building applications with smaller chunks has been shown to accelerate development and allow for more rapid adaptation to changing business needs, the term has recently been applied to human resources and talent development in organizations. A 2018 *Harvard Business Review* article (Cappelli & Tavis, 2018) summarized the trend toward agile talent development that is affecting how companies improve and expand the performance of their employees over time. The concept of *agile*, as it relates to training and development, highlights the fact that the pace of business has become too quick for traditional quarterly reviews and learning plans, pre-defined course sequences and learning management systems, and other slow, calendar-driven efforts to develop people. As the authors state, organizations most successful in adopting agile talent development have invested in coaching, collaboration between individuals and their managers to provide learning and development in response to individual and company needs, which might change monthly, or even weekly in some cases.

A challenge with most coaching models is that they are relatively non-directive (Binder, 2019), engaging those being coached in conversations designed to help the individual identify their own problems or issues and then arrive at their own solutions. While this form of coaching can be useful, it is seldom truly performance-focused. Coaching and development models that link to competency models are another option, but competencies are abstractions, referring to categories of behavior rather than to specific behavior (Teodorescu & Binder,

2004). Even behavior-based coaching may not focus on accomplishments, and consequently might or might not enable those being coached to improve their ability to produce valuable contributions (accomplishments or work outputs) for their organizations.

Our accomplishment-based coaching model (*Six Boxes® Performance Coaching*) offers a compelling alternative to more traditional coaching programs. We intend to ride this trend in the human resources field and demonstrate the power of an accomplishment-based approach for driving individual performance development in line with the immediate business, project, and career path needs of individuals.

Beyond Competency Modeling

Many large organizations long ago adopted competency models as frameworks for recruitment, performance evaluation, learning management, and career path design. They have spent millions of dollars formulating competency models and embedding them in their performance evaluation and management processes, their learning management systems, and in other human resources functions and systems. Thomas F. Gilbert (1978) and Marilyn Gilbert (2019) have used the term *competence* to describe behavior producing valuable accomplishments, or what we call *work outputs*. The value of the accomplishment is related to how it contributes to organizational or societal results. *Competency*, on the other hand, is a term used for several decades by Human Resources and Training professionals to label abstract categories of skills, knowledge, and personal attributes, often used in performance management and learning management systems instead of specific descriptions of performance. See Teodorescu and Binder (2004) for a more detailed discussion.

But let us be clear: Competency models are a disaster, and they are harmful to individuals and organizations (Binder, 2018). This is a controversial position to take in public because so many millions of dollars, careers, consulting firms, and off-the-shelf training providers have been devoted to competency modeling over the last several decades. However, so-called competencies are at best category names for large clusters of behavior, sorted into categories for convenience. When organizations add Likert rating scales to competencies, so that managers “rate” their employees on competencies such as *strategic thinking* or *customer focus* on 1-to-5 scales, the entire enterprise collapses in a heap of subjective judgment. While most HR organizations still seem to defend their use of competency modeling, many senior HR leaders will admit in private that competencies are not helpful. In the worst cases, they introduce a level of cynicism into performance evaluation rituals, where employees feel that the ratings they receive might be dependent on whether their bosses have had their cup of coffee or been in an argument with their spouse that morning. Rating people on abstractions that are, at best, conceptually related to some aspect of an employee’s performance, does not meet any criterion that an applied behavior scientist, let alone a pragmatic leader, might apply. For years I have asked employees and senior executives what they really think of rating scales combined with competencies for determining promotions and pay raises. I generally get lots of eye-rolling in the audience. And these days the eye-rolling is more public.

But organizations do not know what else to do. Some HR professionals (Lambert, 2018) have suggested developing competency models based on *talents* described as recurring patterns of thought, feeling, and behavior. Lambert argues that with artificial intelligence it should be possible to refine definitions of talents across many individuals in ways that will be more useful than current competency models. I would argue that no amount of refinement will change the fact that a competency is an abstract concept based on a wide variety of examples, and therefore cannot by definition be precise enough to pinpoint in the performance of an individual. In our view, any effort to refine competency modeling will be inherently flawed

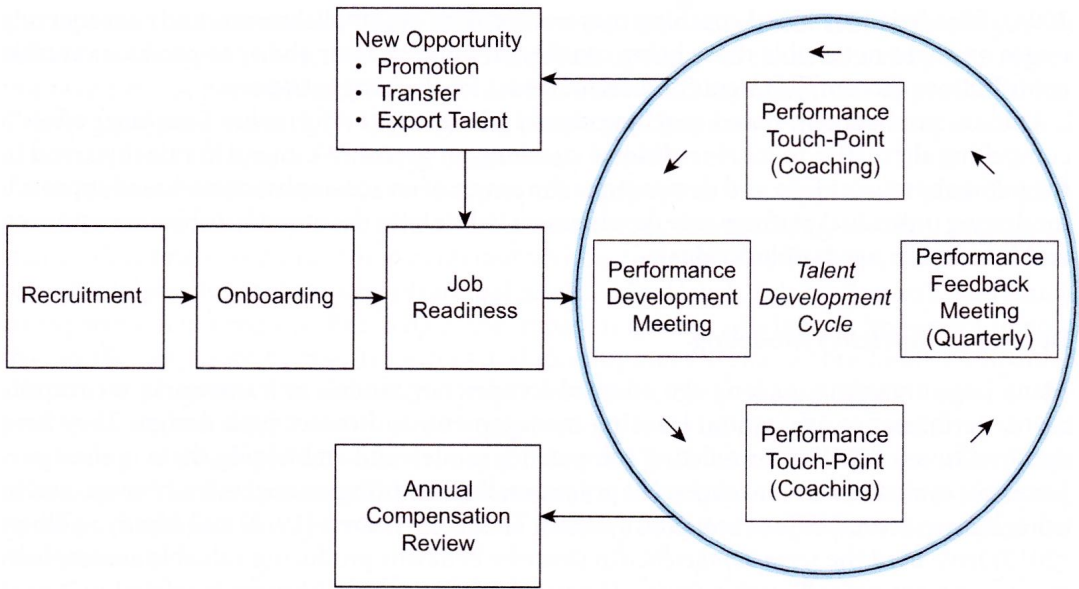


FIGURE 4.5 An accomplishment-based talent development process.

because competencies neither define behavior nor accomplishments with sufficient detail to be managed, developed, or measured, except with rating scales, which some have referred to as “refined opinion.”

We believe that accomplishments provide an alternative to competencies for creating job descriptions, driving the development of individuals based on their own and their organizations’ immediate and long-term needs, planning succession, and every other aspect of talent development.

In organizations as diverse as Easter Seals Bay Area, the Al Futtaim Group in Dubai, and Insperity, HR professionals have created job descriptions that list the major work outputs or accomplishments of jobs. In some organizations, coaches who use the Performance Thinking approach conduct their initial coaching sessions with individuals by creating with the employee a list of the major work outputs (or “contributions”) that the employee produces as part of his or her job. Based on that list, coaches can collaborate with those whom they coach to target specific work outputs for improvement or development, identify additional work outputs that will be required for their next career level, or add and make plans to develop new work outputs based on the needs of the company or workgroup. We believe that focusing on accomplishments can help organizations move beyond competency modeling in a way that will be more performance-focused, and less open to subjective interpretation during the evaluation process.

COMMUNITIES OF PRACTICE

While the phrase “community of practice” is not new, it has taken on a more prominent role in many organizations over the last decade. In part due to software, such as Microsoft’s SharePoint and many other platforms for collaboration, networking, and document sharing that have followed, organizations often designate communities of practice to accelerate collective learning and development across groups who share interests, areas of focus, disciplines, functional roles, and so on.

At companies that adopt Performance Thinking® programs and methods, the two simple pictures and 21 plain English words that comprise its models offer a shared vocabulary to support communities of practice. Organized brown bag lunches among managers who coach using our accomplishment-based approach, online web meetings, SharePoint applications, and concerted efforts from community of practice leaders to harvest what leaders, managers, and performance professionals learn with and from one another empower communities of practice. Focusing on accomplishments, and using a shared vocabulary for the elements of performance and behavior influences, facilitates communication across otherwise diverse groups and individuals.

At a global level, a community of practice is emerging among users of Performance Thinking² programs and models. The annual Six Boxes Summer Institute (www.SixBoxes.com), having completed its tenth year, brings together people from many different industries, geographies and roles. We have had participants in human services, professional athletic organizations, corporations across multiple industries, from North America, Europe, South Korea, Africa, and elsewhere. We've had training and development professionals, management consultants, safety and error reduction specialists, leaders, managers, and executives from many different organizations, all sharing insights and applications related to performance using the shared models and language of this approach. The potential for communities of practice that leverage plain English and simple models is significant, and offers a way to get beyond the common silos created by different vocabularies, areas of application, and professional specialties.

SUMMARY AND CONCLUSIONS

Approaching human performance with a focus on the valuable products of behavior, called accomplishments or work outputs, changes the conversation in organizations about how individuals, teams, and processes deliver value toward common business and societal goals. When we discipline ourselves to first identify the “countable nouns” representing value delivered, it becomes possible to agree on criteria for “good” instances of those accomplishments and to zero in on the behavior needed to produce the accomplishments with high degrees of quality and productivity. When we expand our framework of behavior influences from the three-term contingency to the categories originally identified by Gilbert (1978) in his Behavior Engineering Model, we facilitate discussion about variables that might otherwise not be considered, at both the organizational and individual level. And when we communicate about the elements of performance and behavior influences in plain English that everyone can quickly understand and adopt, we accelerate the pace at which individuals from many different levels and functions in an organization can collaborate to create solutions and drive continuous performance improvement. Those have been the lessons learned on the evolutionary path described in this article.

We might summarize what we have learned in several key points:

- Gilbert's insight that accomplishments are valuable while behavior is costly has the potential for transforming how we approach organizational performance.
- User-tested plain English terminology for technical concepts, first modeled by Lindsley when he took behavior science from the laboratory to special education classrooms, can broaden the application of behavior science to a wider audience of users.
- When we place behavior science in the hands of people at all levels and in all functions, with simple models and language and a focus on the valuable accomplishments that people contribute to organizations, we can accelerate continuous performance improvement and support agile talent development, more likely able to keep up with the rapid pace of change in today's business and work environments.

STUDY QUESTIONS

1. Describe the “paradigm shift” that Gilbert’s work was associated with.
2. How did the use of precise definitions/specific language contribute to the author’s work?
3. Why does the author believe people have a hard time shifting from a focus on behavior to a focus on accomplishments?
4. What is the author’s main concern with competency-based models?
5. Summarize the three key points the author described at the end of the chapter.

NOTES

1. We have refrained from naming client organizations in this article because most of our clients specified in contracts and master service agreements that we cannot use their names in publications or marketing without specific permission, which can require lengthy legal reviews and documentation.
2. *Performance Thinking*® and *Six Boxes*® are registered trademarks of The Performance Thinking Network and should not be used to label products or services provided by other organizations or individuals. We request that those who cite these models or this approach acknowledge copyright and trademarks, as applicable, and refer to www.SixBoxes.com in their citation.

REFERENCES

- Barrett, B.H. (1977). Behavior analysis. *Mental Retardation and Developmental Disabilities*, 9, 139–202.
- Binder, C. (1987, September). Computing “fluency” and productivity. *Managing End User Computing*, 4–5.
- Binder, C. (1988). Precision Teaching: Measuring and attaining exemplary academic achievement. *Youth Policy Journal*, 10(7), 12–15.
- Binder, C. (1990a). Efforts to promote measurably superior instructional methods in schools. *Performance & Instruction*, 29(9), 32–34.
- Binder, C. (1990b, September). Closing the confidence gap. *Training Magazine*, 49–56.
- Binder, C. (1991). Marketing measurably effective instructional methods. *Journal of Behavioral Education*, 1(3), 317–328.
- Binder, C. (1996). Behavioral fluency: evolution of a new paradigm. *The Behavior Analyst*, 19(2), 163–197.
- Binder, C. (1998). The Six Boxes™: A descendent of Gilbert’s Behavior Engineering Model. *Performance Improvement*, 37(6), 48–52.
- Binder, C. (1999). Fluency development. In D.G. Langson, K.S. Whiteside, & M.M. McKenna (Eds.), *Intervention resource guide: 50 performance improvement tools* (pp. 176–183). Jossey-Bass/Pfeiffer.
- Binder, C. (2003, March). Doesn’t everybody need fluency? *Performance Improvement*, 42(3), 14–20.
- Binder, C. (2009a). *A view from the top: human performance in organizations*. White paper published by The Performance Thinking Network, LLC, available in the online SixBoxes.com Resource Library at <https://bit.ly/2Y59UY2>.
- Binder, C. (2009b). Measurement, evaluation, and research: Feedback for decision making. In J.L. Mosley & J.C. Dessinger (Eds.), *Handbook of improving performance in the workplace Volume 3: measurement and evaluation* (pp. 3–24). Pfeiffer and the International Society for Performance Improvement.
- Binder, C. (2014). Teachers and students passing it on. In R.D. Holdsambeck and H.S. Pennypacker (Eds.), *Behavior science: Tales of inspiration, discovery, and service* (pp. 263–288). Cambridge Center for Behavioral Studies.
- Binder, C. (2018). Why competency based HR systems are unfair and ineffective. Blog post in *Performance improvement from the inside out*. www.SixBoxes.com.
- Binder, C. (2019, June). Why trademark a performance improvement methodology? ISPI. The International Society for Performance Improvement. <https://bit.ly/2Z2McbN>
- Binder, C. & Bloom, C. (1989). Fluent product knowledge: application in the financial services industry. *Performance and Instruction*, 28(2), 17–21.
- Binder, C. & Sweeney, L. (2002). Building fluent performance in a customer call center. *Performance Improvement*, 41(2), 29–37.
- Binder, C. & Watkins, C.L. (1989, December). Promoting effective instructional methods: solutions to America’s educational crisis. *Youth Policy*, 1(3), 33–39.
- Binder, C. & Watkins, C.L. (1990). Precision teaching and direct instruction: Measurably superior instructional technology in schools. *Performance Improvement Quarterly*, 3(4), 74–96.
- Cappelli, P. & Tavis, A. (2018, March–April). HR goes agile. *Harvard Business Review*, 3–8.
- Gilbert, T. F. (1978). *Human competence: Engineering worthy performance*. McGraw-Hill Book Company.
- Gilbert, M.B. (2019). Human performance technology: Further reflections on Human Competence. *Journal of Organizational Behavior Management*, 39(1), 7–112.

- Gilbert, L.M., Weersing, S., Patterson, S., Fisher, L. R., & Binder, C. (2014). The cobblers' children: Improving performance improvement at Amerigroup. *Performance Improvement*, 53(2), 22–33.
- Harless, J.H. (1975). *An ounce of analysis (is worth a pound of objectives): A Self-instructional lesson*. Harless Performance Guild.
- Harless, J.H. (1987). *Front end analysis workshop materials*. Harless Performance Guild.
- Haughton, E. (1972). Aims – growing and sharing. In J.B. Jordan & L.S. Robbins (Eds.), *Let's try doing something else kind of thing: behavioral principles and the exceptional child*. A report from the Invisible College Conference on Application of Behavioral Principles in Exceptional Child Education, March, 1971 (pp. 20–39). The Council for Exceptional Children.
- Lambert, E. (2018). *A case for talent-based competency models (and how AI can help)*. Talent Take Five, a blog from Plum, Inc. November 2, 2018. <https://www.plum.io/blog/a-case-for-talent-based-competency-models>
- Lindsley, O.R. (1971). From Skinner to precision teaching: The child knows best. In J.B. Jordan & L.S. Robbins (Eds.), *Let's try doing something else kind of thing: Behavioral principles and the exceptional child*. The Council for Exceptional Children, 1–11.
- Pennypacker, H.S., Koenig, C.H., & Lindsley, O.R. (1972). *Handbook of the standard behavior chart*. Precision Media.
- Pennypacker, H.S. (1986). The challenge of technology transfer: Buying in without selling out. *The Behavior Analyst*, 9(2), 147–156.
- Segall, K. (2013). *Insanely simple: The obsession that drives Apple's success*. Portfolio/Penguin.
- Teodorescu, T.M. & Binder, C. (2004). Competence is what matters. *Performance Improvement*, 43(8), 8–12.
- Watkins, C.L. (1988). Project Follow Through: A story of the identification and neglect of effective instruction. *Youth Policy*, 10(7), 7–11.
- Watkins, C.L. (1997). *Project Follow Through: A case study of contingencies influencing instructional practices of the educational establishment*. The Cambridge Center for Behavioral Studies. Available at www.behavior.org.