

The Six Boxes™: A Descendent of Gilbert's Behavior Engineering Model

by Carl Binder

Carl Binder, Ph.D., one of B.F. Skinner's last students at Harvard, was Associate Director of a university-affiliated research center during the 1970s. He started his first consulting firm in 1982, Precision Teaching and Management Systems, Inc., where he commercialized his research as the Fluency Building instructional and assessment methodology. He continued to develop fluency-based instructional methods in his second company, Product Knowledge Systems, Inc., where he pioneered key concepts and processes in what is now known as "knowledge management" and developed the research-based Product Knowledge Architecture for sales and marketing organizations.

Carl recently moved from Boston to Santa Rosa, California, to partner with Cynthia A. Riba, forming Binder Riba Associates and producing a son. He has shifted the focus of his business from delivering large performance technology projects to providing strategic performance consulting and delivering workshops, tool sets, and other ways of enabling his clients to do it themselves. You can contact Carl by email: CarlBinder@aol.com, via his company's web site: www.binder-riha.com, or by phone: (707)578-7850.

Thomas F. Gilbert contributed many powerful ideas and models to the practice of improving human performance in organizations. Perhaps the most important of these was his emphasis on the *products* of behavior rather than on behavior itself. By focusing on *valuable accomplishments* produced on the job by behavior, he provided the missing link from individual or group behavior to the economic goals of an enterprise. His definition of human competence (Gilbert, 1978) as a function of worthy performance (expressed as an equation in Figure 1) supports the calculation of return on investment (ROI) in performance improvement.

While his accomplishment-based approach to performance improvement is not always fully understood or practiced by those in the field of human performance technology (HPT), it towers over his other strategic and tactical contributions to our field. Many of his other contributions were useful models or templates for performance analysis or design, tools that served subsidiary roles in relation to his overall accomplishment-based approach.

Among them, the Behavior Engineering Model (Gilbert, 1978) has been the most valuable to me. This article describes some of the applications that I and my associates have developed, adapting the categories from Gilbert's model in a trademarked approach that effectively communicates and applies

performance improvement principles with ordinary non-technical people in organizations.

It may be worthwhile to note that Tom Gilbert, brilliant though he was, never quite succeeded in making his work commercially successful. Many of his colleagues and students (e.g., Harless, Zigon) have been able to transform his concepts into commercially viable businesses, thereby allowing the world to benefit from Tom's brilliance. But Tom himself was always more a visionary professor than a successful businessman, and I sincerely hope that my old friend would be pleased to see how we have been able to gain wider acceptance and application for some of his key insights.

Adapting the Model

The original Behavior Engineering Model, as presented in *Human Competence* (Gilbert, 1978) owed its structure to Skinner's three-term contingency (Skinner, 1969), which identified *discriminative stimuli*, *responses*, and *consequences* as the components of behavior-environment interactions. Acknowledging Skinner's contribution to our understanding of behavior and the variables that control it, Gilbert aligned the three columns in his six-cell model with the three terms in Skinner's formula. He distinguished between environmental factors (*data*, *instruments*, and *incentives*) and individual factors (*knowledge*, *capacity*, and *motives*) corresponding to Skinner's three components.

