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Performance Improvement Based on Results: Is Our Field Interested in Adding Value?

by Ingrid J. Guerra

The International Society for Performance Improvement (ISPI) and—indeed, more recently—the American Society for Training and Development (ASTD) have been explicit about shifting from a "training" focus to a "performance" focus. This transformation is associated with a profession-wide stated intention to move from concentrating on resources and methods (such as training or electronic performance support systems) to results, human and organizational performance accomplishment (Clark & Estes, 1999; Kaufman & Clark, 1999). By further extension, the results we are—or should be—ultimately accountable for extend beyond individual and small-group performance to incorporate organizational performance and perhaps societal issues as well (Kaufman, 1992, 1998, 2000; Stolovitch & Keeps, 1999).

Although there are various definitions for human performance technology (HPT) (see Gilbert, 1996; Rosenberg, 1990; Stolovitch & Keeps, 1992, 1999), Harless offers one that best exemplifies a focus in results. He defines HPT as "an engineering approach to attaining desired accomplishment from human performers by determining gaps in performance and designing cost-effective and efficient interventions" (cited in Geis, 1986, p. 1). This requires that HPT professionals assess and analyze gaps in results before selecting the means to close these gaps (Kaufman, 1992, 1998, 2000; Watkins & Kaufman, 1996). Moreover, HPT professionals should base their decisions and efforts on empirical research if they are to demonstrate the added value of their prescribed interventions (Clark & Estes, 1999).

Approach

Although widely noted by the profession, this results-based approach does not appear to be commonplace practice. A review of *Performance Improvement* journals published from January 1998 to June 1999 was conducted to identify a sample of what aspects of performance improvement we have placed most emphasis on recently. This journal was selected primarily because of its reputation as the most popular journal in performance improvement; as such, the author expected it to be most representative of the field. A total of 75 articles were reviewed, excluding those labeled book reviews, interviews, essays, commentaries, emerging technology, and professional practice.

To categorize the different aspects of performance improvement covered by these articles, a matrix was used based on one created by Watkins, Leigh, Foshay, and Kaufman (1998) for *Performance Improvement*. So that the readers share the same basis for interpreting the matrix, some elaboration on terms follows.

Focus

What is the overall focus of the article? The author used Kaufman's Organizational Elements Model to

categorize the central theme of an article based on five possibilities: mega (societal results), macro (organizational results), micro (individual/small group results), processes, or inputs.

Evaluation

What level of evaluation is used to assess effectiveness? The evaluation model used was Kirkpatrick Plus, based on Kirkpatrick's levels of evaluation (1967), expanded to also include societal payoffs (Kaufman & Keller, 1994; Kaufman, Keller, & Watkins, 1995; Watkins et al., 1998).

Responsiveness

Is the subject of the article useful in anticipating future opportunities (proactive), or is it useful for avoiding or solving existing problems (reactive)? For instance, an article categorized as "proactive" would consider determining and linking long-term objectives at all levels of results before selecting the appropriate means to achieve such results. On the other hand, a reactive approach may not look beyond a macro-level result (that is, return on investment), overlooking a product's impact on society (mega) in the future. Examples are illustrated by products such as Phen Phen, asbestos, and Firestone tires, where there was a negative and even fatal impact on consumers. Ultimately, the organizations responsible were faced with lawsuits, bankruptcy, and other negative consequences.

Linkages

Does the topic of the article convey an outside-in or an inside-out approach to planning? Outside-in planning starts with goals and objectives (beginning from societal results to organizational and individual results) and rolls down to select and link the required resources (means to achieve these results). The inside-out approach, however, begins with resources (such as training or technology) and assumes it would automatically render the desired results. This is an important issue to consider because a lack of linkages can sustain our biases for preferred or comfortable interventions, preventing us from considering the full spectrum of possibilities, given the results we aim to achieve.

Theoretical Basis

Is the topic based on *authentic technology*, a solution resulting from a systematic analysis that identifies the problem being solved, selects and translates appropriate, well-designed research, and applies it to the design of culturally appropriate solutions; or is it based on *craft*, professional practice that has not been based on any of these elements (Clark & Estes, 1999)?

While we are making distinctions between means and ends, it is also important for us to reflect on what we consider common practice. Are these practices based on sound theoretical research, or is it the latest trend that has everyone in a frenzy, without any concrete data as to its

AUDIENCE		FOCUS		EVALUATION	
• Government	0%	• Societal Results	4%	• Societal Value Added	1%
• Business & Industry	89%	• Organizational Results	4%	• Organizational ROI	10%
• Education	1%	• Individual Results	3%	• Application of Skills	13%
• General	10%	• Processes	78%	• Acquisition of Skills	10%
		• Inputs	11%	• Reaction to Intervention	4%
				• Not Addressed	62%

RESPONSIVENESS		LINKAGES		THEORY BASIS	
• Proactive	2%	• Outside-In	17%	• Technology	21%
• Reactive:		• Inside-Out	83%	• Craft	79%
• Problem Avoid	50%				
• Problem Solve	48%				

Figure 1. Distribution Summary.

effectiveness? For this reason, the theoretical basis category is also included.

Since the level of directness in addressing some of these elements varied considerably among articles, the author made inferences based on the context of each article. For example, if the topic was training with a primary concern in content learning but there was no explicit mention of evaluation, the author inferred the use of a Kirkpatrick Plus, Level 2 evaluation.

Findings

The following section provides a brief description of the results of this study (see Figure 1 for a distribution summary).

Audience

The majority of articles (89%) were primarily directed toward business and industry, while seven percent were not specifically targeted at a given audience. The latter dealt with content that may have been applicable to government, business and industry, or education, while the former used language and examples specific to business and industry (such as return on investment, corporate strategy, business success, etc.)

Focus

There was an overwhelming emphasis on processes (78% of articles). Such articles advocated or centered on a particular intervention (such as designing, training, changing, managing, etc.) without clearly distinguishing it from measurable results. Inputs were the focus of 11% of the articles (that is, technology, the Internet, support systems, etc). The remaining articles centered on results (four percent small group or individual results, four percent organizational results, and three percent societal results).

Evaluation

Evaluation shared similarly low frequencies for societal value added, with only one percent of articles addressing such assessment (Kirkpatrick Plus, Level 5). Ten percent addressed the assessment of organizational return on investment (Level 4); 13% addressed application of skills, actual performance (Level 3); 10% addressed acquisition of skills (for instance, end of training assessment of what was learned); four percent addressed reaction to intervention, end-of-training assessment of whether participants liked

training (Level 1), while well over half (62%) did not address assessment, directly or indirectly.

Responsiveness

In terms of responsiveness, two percent were found to be proactive, meaning they identified future opportunities before they became problems. For instance, one of these articles emphasized societal needs as the basis for planning business strategies. An overwhelming 98% were found to be reactive (they did not identify future opportunities). From these, 50% targeted avoiding a problem—for example, miscommunication—and 48% addressed solving a problem, for example, managing unsatisfactory performance.

Linkages

A total of 17% of the articles contained outside-in linkages (that is, identified desired performance and then identified a potential intervention) while 83% used an inside-out approach; that is, they centered on the intervention, without a clear linkage as to the desired performance it would result in.

Theoretical Basis

Finally, 21% of the articles had a theoretical basis (that is, authors based their work on cited research and theories), while 79% were craft—that is, they discussed a current practice without mention of empirical base or replicable results.

Discussion

The unbalanced distribution within each category is disconcerting if we are to take our stated professional intention to shift from "training" to "performance"… and perhaps beyond. Beginning with the targeted audience, it is puzzling that the overwhelming majority of articles address business and industry, rather than more evenly addressing education, government, and the military. While it may be a reflection of the backgrounds and experiences of the authors (and possibly the reviewers), it is unlikely that only business and industry can benefit from the contents of this journal. While it is true that 70% of ISPI's membership, and thus the primary *Performance Improvement* readership, comes from business and industry (ISPI Membership breakout, October 1, 1999), an "authentic technology" approach to research does not assume that findings from one business organization can automatically be applied to organizations in other business lines or sectors (Clark & Estes, 1999). *Performance Improvement* is a journal about performance results, not just business practices. It is important to ask ourselves if the

process of performance improvement in business is fundamentally different than performance improvement in other settings. If so, in what ways? Knowing the unique characteristics of each setting is necessary if we are to identify and select efficient as well as effective performance solutions. We can also benefit from keeping ourselves informed about successes and failures in other areas, as that can help us clarify the conditions under which particular solutions may or may not be effective.

Also important to our success is clearly distinguishing between means and ends (Kaufman, 1992, 1998, 2000). Therefore, we must understand that the ultimate end we seek is improved performance, and that the things that we do—processes (for example, training, managing, developing, etc.)—and the things we use—inputs (for example, our budget, technology, policies)—when properly applied, should yield valid and measurable results. If we cannot define and justify what our ends are, at every level (mega, macro, and micro), how can we confidently determine what the required processes and inputs that will help us achieve our objectives are?

The "linkages" category included in the matrix should help us reflect on whether we are selecting processes assuming that they will yield positive results (inside out), or whether we are using societal objectives to help us define or clarify our organizational, small-group and individual objectives, as well as the appropriate processes and inputs (outside in). If we insist on operating from the inside out, we will continue to react to problems instead of being proactive and creating opportunities for society, our organizations, and ourselves (Dean, 1993; Kaufman, 2000).

Similarly, evaluation and theoretical research can be invaluable tools not only for determining the appropriateness and effectiveness of interventions, but also for justifying our efforts and even our jobs. The rigor of evaluation and research helps us continuously improve our efforts, using solid data as the basis for our decisions rather than myths, rumors, and premonitions about what might work. This is true not only for selecting new solutions, but also for linking our solutions to validated and useful objectives, as well as assessing the efficiency and effectiveness of our existing processes.

Conclusion

A number of popular solutions are available, and probably a larger number of organizations is eager to try them. The conventional wisdom is that if everyone is doing it, we should be doing it as well. However, this type of mentality will not help our organizations or society succeed, nor will it help us advance the field of performance improvement. It would instead represent a lateral shift from one process of choice (such as training) to other popular interventions (such as electronic performance support systems). A vertical shift toward useful and measurable results requires us to think systemically, taking under consideration all elements that have an impact on our objectives—societal, organizational, and individual—and systematically following a logical and orderly process to identify appropriate solutions.

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Sometimes I feel something important is missing, something that must be accounted for, yet remains unnamed. "It goes without mentioning," is a phrase often used by those of us who wish to skip the basics and move on to whatever interests us the most. An error? Perhaps, perhaps not, it depends on the situation. However, by skipping the basics, we often leave out important information. "Allow Me to Introduce" is a series of short articles about people in our business who embody those basics.

Many of you have seen some of these pieces before. They appeared in *Performance Improvement Quarterly* (*PIQ*) in the early 1980s and were about people like Mager, Skinner, Lewin, and Harless. The time has come to continue the series. The idea was supplied by International Society for Performance Improvement (ISPI) Past President Char Seyfer Wells, who asked for a series featuring "unsung heroes." My problem became one of identifying and then chronicling such people. Who are they? The solution to this problem came when Char gave me a set of materials in which many people are mentioned as prominent in the field. The materials also noted that the field is diverse, and it has many categories, all of which have contributed people of influence.

I suspect you will find these tales as fascinating and rewarding as the authors have in discovering them. Most of this material comes through interviews with the people featured.

There is an obvious caveat. What you read here is the authors' impression of the interview. How the authors personally think about the person interviewed is reflected in the material. The goal is to provide at least a cursory understanding of these people as people, human beings with feelings, aptitudes, values, and foibles like the rest of us. They are special. And they are human.

—**Odin Westgaard,** *Column Editor*

UNSUNG HEROES

Allow Me to Introduce:

Thiagarajan "Thiagi" Sivasailiam

by Deb Haney and Sheryl Narahara

What do games, fun, and money passed out during training have in common? Learning and behavior changes, when Thiagi is involved, for Thiagi is known for both his incredible knowledge and his use of games and simulations.

Sivasailam Thiagarajan is best known simply as Thiagi. His involvement in training and performance technology started in Chennai (originally known as Madras), Tamil Nadu, where he was born into a family of school teachers. Those family connections continue today; Thiagi's wife teaches, and their son writes computer-based training for workshops by Thiagi. Thiagi's early career as a high school physics teacher shaped his basic approaches to corporate training. He sees standing in front of an audience, either teaching or training, as an opportunity to inspire and motivate people.

While teaching in India, Thiagi read educational psychology and technol-ogy books from England and America. Among them were articles by George Leonard and B. F. Skinner on programmed instruction. Thiagi began writing his own pro-grammed instruction and sent one to the National Center for Educational Research and Training. The response eventually led to Thiagi being "dis-covered" by a psychology professor at Indiana University (IU) in 1967. Starting in the psychology department, Thiagi soon transferred to the instruc-tional systems technology department because, as