



Volume 2—  
Issue 1

Winter  
2002-2003

# Pursuing Performance

with EPPIC Inc.

*The Enterprise Process Performance Improvement Consultancy Inc.*

## EPPIC Inc.

*Achieve Peak Performance*

*to protect and improve  
the enterprise*

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### Articles In this Issue:

#### EPPI Stage I

—by Guy W. Wallace

#### S.C.O.P.E. -Part 4 of 4

— by Todd Packer

#### ISD— A Powerful Approach When Used Well

— by Beagles and Griffin

*Thanks to our  
guest authors!*

On Watch From the Bridge

## Transitioning from Training to Performance

- or doing both well as measured by ROI

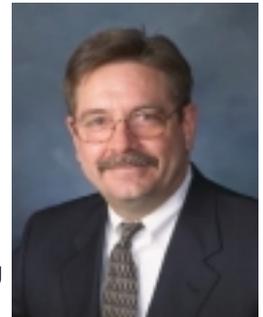
Many training departments (or Learning departments nowadays) are attempting to make the transition from being only a training/learning products organization to a performance improvement organization. My watchwords are: Do it, but be careful. Be a master of the former before tackling the latter.

It is extremely important for all of us in the "ISD space" to focus "not" on training, a means, but on performance, an ends.

That requires approaching training from a performance/capability focus, not a topical/content focus. It also requires being able to spot, and then carefully communicate to the clients who may be expecting training, that maybe training won't solve their problem. The best way I've found to accomplish this is to have that conclusion come from "the customer side" of the interaction...as in the customer-side of the customer-supplier interaction.

I've found that by engaging a Project Steering Team of stakeholders and then their handpicked Master Performers, that when the word (captured in the Analysis Report) comes back that none, some, or all of it (the problem opportunity articulated prior to the "performance analysis" was begun) is due to knowledge/skill deficiencies, it's more likely to be believed. But that's just the means to my ends: smarter project decisions at the various gate reviews, beginning with a quick analysis that uncovers the root cause(s).

But if the "data says" it is a knowledge/skill deficiency, then those performance improvement organizations will still have to step up to the plate and bat out some training & development (T&D) "hits." That is, T&D that really works at levels 1, 2 3, and 4. T&D that gets 90% of the learners to meet 90% of the terminal objectives (which to me are performance objectives and not learning objectives...with the returns far exceeding the costs. Getting 90% to 90% at a negative ROI doesn't do anyone any good. Not really. Not the shareholders or any other stakeholders, including the learners.



EPPIC's Guy W. Wallace

*(Continued on page 2)*

## Plan on Attending the ISPI Spring Conference in Boston in April !

Please consider attending the ISPI Spring Conference in Boston at the Sheraton Boston Hotel and Conference Center this April 12-15, 2003. Pre-conference workshops are being held April 11-12th. Sharpen your skills!

Guy has two presentations at the conference: an "encore presentation" titled: "Aligning with the Voice of the Customer at 3 Levels." This session was one of the top 10 in evaluation results at the Dallas conference in April 2002.

The second presentation is based on an article published in ISPI's PI Journal in August 2002 and is titled: "Designing for the Life Cycle: Making Decisions Today that Pay Tomorrow." Are your design decision leading to increased or decreased costs over the life cycle of your training/learning products? How does that impact ROI?



[www.ispi.org](http://www.ispi.org)

For more information regarding ISPI and the Spring and Fall conferences, go to: [www.ispi.org](http://www.ispi.org). I hope to see you in Boston!

## Transitioning from Training to Performance *-continued*

(Continued from page 1)

Often our clients expect T&D as an outcome. AND many times it is a legitimate end goal. Sometimes our clients know that training is appropriate because it's a "new hire situation," or perhaps the exit interviews are showing too much frustration from those leaving. Maybe they felt that they were never really prepared to do the job successfully...despite spending weeks in the existing T&D. And so T&D is appropriate. But again, only if the Return exceeds the Investment!

Years ago, probably 20 years ago, I and many others learned from Joe Harless at an ISPI conference to never respond to a request for training with the challenge: "How do you know it's a training need?" Joe taught us to answer, "Yes, we can help you!" and then go about our work as professionals and let the analysis data chips fall where they may. And if you are thinking that your clients never "let" you do analysis, then I believe you've probably got a bad analysis method in place, in dire need of displacement. Too many analysis efforts seem like "analysis paralysis." You need to do great analysis fast, and it needs to produce something credible.

I've often wondered at the all too familiar approach where an ISD'er goes about all sorts of analyses on complex job performance, by themselves. They began with hardly a clue, and then come back with the golden nuggets of truth. Far too often they don't get it right enough for their clients. That's why the analysis pushback happens. The client can't believe that an ISD'er can figure it out that quickly and get anywhere close to the truth. Of course there are always exceptions. Some ISD'er can get it done that well that fast. But after 23 years in this field, those indeed seem to be the exceptions rather than the rule.

My approach is to never pretend that I can get that smart about someone else's job in that short a time frame, and instead, I'll facilitate a group of the best and brightest performers that the client handpicks and with them, paint a picture of ideal job performance and conduct a gap analysis. Master Performers always know why they are and others are not. The simple format of our Performance Model captures it all for easy construction and easy reviews later with the client. It's all too obvious, in some situations, that it's not a training issue, and that other, non-instructional interventions are called for to really address the root cause of the problem/opportunity.

Then I use them to systematically derive the enabling knowledge and skills (because that's what was contracted for); and everyone then sees exactly what the content of real performance-based T&D will turn out to be, if it gets to that point. It has never failed. And the real answer always sells, because it's not me, some ISD'er who has decided the truth; it's the client's handpicked Master Performers that do that instead.

We call of ISD methodology PACT, as in the PACT Processes for T&D. **PACT** is an acronym for: Performance-based, Accelerated, Customer/Stakeholder-driven, T&D.

It also represents that Pact is an agreement with our clients. PACT quickly benchmarks the client's Master Performers' best practices, and if needed, builds performance-based T&D to enable everyone else to better emulate those masters. But if it is not a knowledge/skill deficit, or it is but not exclusively, PACT pinpoints within the ISD analysis effort which other variables in the performance situation need to be addressed.

PACT is one of the few ISD methodologies that allows a T&D organization to "do the right thing" once the analysis has been conducted, including both instructional and non-instructional solutions.

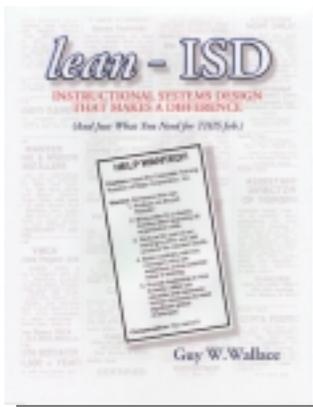
And isn't that what most situations require when explored carefully? That has been my experience after 23 years in this business.

My best wishes go out to you and yours for a great New Year all year long for 2003!



*I don't think it wise to tackle Performance if your training system and processes aren't producing stellar instructional products.*

*Master ISD first and then tackle Performance via non-instructional approaches!*



Guy's award winning book: *lean-ISD* is available from both

**Amazon.com and the ISPI bookstore at ISPI.org**

# EPPI - Stage I: Targeting EPPI

## By Guy W. Wallace

EPPI,<sup>SM</sup> is a *methodology-set* for Enterprise Process Performance Improvement. These methods lead to improvement in Human Asset Management Systems (HAMS), and Environmental Asset Management Systems (EAMS). In other words, both instruction, and non-instruction are the means to the ends of process performance improvement for the benefit of the enterprise.

There are two stages to EPPI:

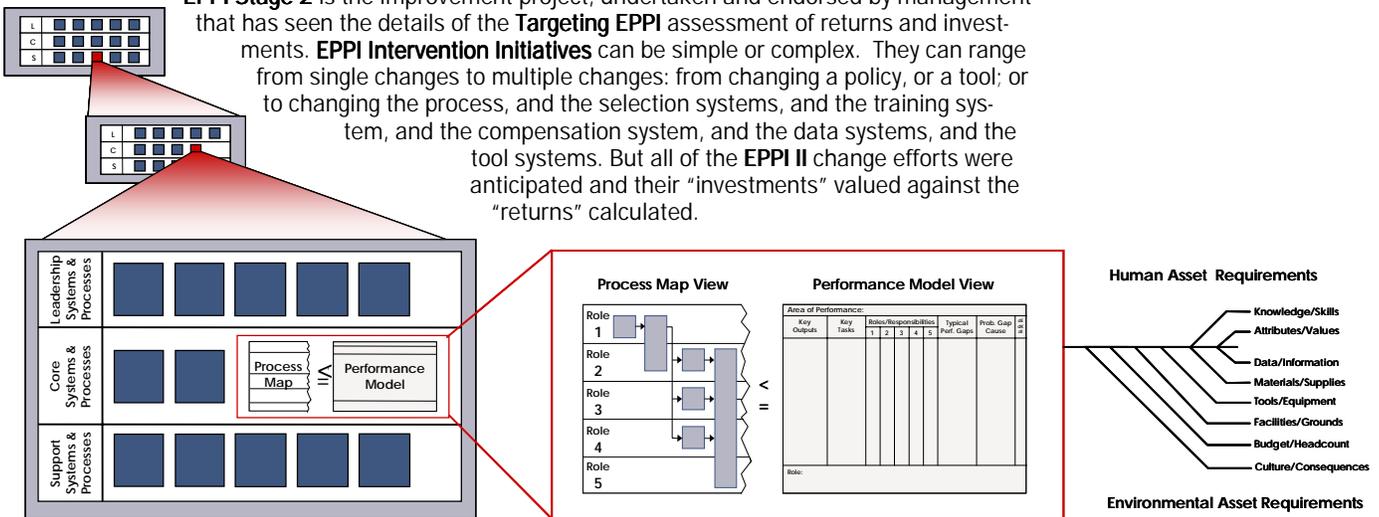
1. **Targeting EPPI** – is where a little effort is expended to conduct quick analysis and design efforts in order to build a preliminary “business case” for going after significant ROI. The potential entanglements with other processes are brought to light. Their costs are factored in to the bigger picture of “Total Investments” for “Total Returns.” Improvements that don’t show enough ROI and EVA “promise” never see the light of day or a nickel more of shareholder equity.
2. **EPPI Intervention Initiatives** – is where the significant ROI promised in the upfront Targeting EPPI efforts, is achieved via structured interventions that fully anticipate all of the entanglements (efforts and costs) involved in addressing what are usually complex situations; especially for those with significant strategic and financial impact.

The final results of a **Targeting EPPI** effort, is a implementation plan accounting for both anticipated investments and returns, a business case with an ROI forecast!

**EPPI Stage 1** is used for complex, enterprise-wide assessments before launching into an improvement effort. **Targeting EPPI** is conducted either formally or informally following a 4 phase approach:

The final results of a **Targeting EPPI** effort, is a implementation plan accounting for both anticipated investments and returns, a business case with an ROI forecast. This portion of **EPPI** allows management to employ both “command and control” and “empowerment” methods to accomplish improvements that impact the bottom-line.

**EPPI Stage 2** is the improvement project, undertaken and endorsed by management that has seen the details of the **Targeting EPPI** assessment of returns and investments. **EPPI Intervention Initiatives** can be simple or complex. They can range from single changes to multiple changes: from changing a policy, or a tool; or to changing the process, and the selection systems, and the training system, and the compensation system, and the data systems, and the tool systems. But all of the **EPPI II** change efforts were anticipated and their “investments” valued against the “returns” calculated.



### Stage I- Targeting EPPI

The first stage of EPPI is about the systematic, and quick, analysis, and the development of improvement specification and macro implementation planning for targeting worthy, based on their ROI and Value Add potential.

Ultimately the targets for improvement initiatives will involve the process(es) themselves, or the human assets and systems supporting the targeted processes, and/or the environmental assets supporting the targeted processes; or two or three of the three variables. Targeting EPPI requires a systematic view and analysis. If done correctly, only the high-payback problems and opportunities will be addressed.

Targeting EPPI focuses attention on the potential of parallel improvement initiatives that might need to

*EPPI, like the PACT Processes, is based in large part to the derivative Rummier methods I first learned back in 1979*

(Continued on page 4)



## S.C.O.P.E.: Discover Your Performance Excellence—Part 4 of 4 By Todd Packer

Wow. We now complete our exciting new approach to assessing and improving organizational performance! This is S.C.O.P.E.: Strategic Creative Organizational Performance Excellence. A goal as well as a tool, both an outcome and a process. Through creative problem-solving, the author will demonstrate a four-part model of observation and analysis that can guide practitioners through the complexities of modern workplaces to identify obstacles and opportunities.

Each article has highlighted one facet of S.C.O.P.E., through the metaphor of "scope:" microscope, periscope, kaleidoscope and kaleidoscope. The use of metaphor in organizational analysis is supported by the literature in the field (see (Marshak, 1996) and (Morgan, 1998)) as well as by the author's experiences. Human performance technologists, instructional designers, managers and trainers can benefit from this multidisciplinary approach.

Let's shed light and focus our efforts upon areas of performance that are often elusive as we investigate the separation between current state and desired state. Scope out the gap, as it were.

### Article Introduction

"In the memory of man, no invention, and no work, whether addressed to the imagination or to the understanding, ever produced such an effect."— Dr. Peter M. Roget, (creator of the famed Thesaurus) quoted in Blackwood's Magazine in 1818, referring to his friend Sir David Brewster's invention, the kaleidoscope, per [http://www.brewstersociety.com/brewster\\_bio.html](http://www.brewstersociety.com/brewster_bio.html)

"It is astounding that one basic concept involving a simple set of mirrors, with an eyepiece at one end and an object cell at the other, can produce such a limitless variety of creative ingenuity,"—Cozy Baker "First Lady of Kaleidoscopes." founder of the Brewster Society (quoted in Gilbert, 2001)

Can organizations be beautiful? Sometimes there is a thrill about this performance improvement business. The patterns uncovered in needs assessments, data analysis, communications and observations of culture can slowly and effectively reveal the simplicity, power and dynamism of an organization. Decision-makers achieve clarity with these pictures in a fashion that is both practical and profound.

Twist me wonderful productive. Now we throw it all together and take a final step through the scope metaphor.

### Twist and Shout: A Brief KSCP Introduction

"...And here I humbly hint to Dr Brewster,  
That if he'd make us a kaleidoscope  
To strike new subjects out, at every new stir,  
'T would give poor authors a consoling hope;  
For though the muses, when we call them, do stir,  
They 're monstrous indolent, and apt to mope.  
The three times three, of late, are growing slatterns,  
As I suppose, for want of good new patterns."

Bradley, W. H. (Misc.) "Giuseppino" found in *Landmark Anthologies: Specimens of American poetry, with critical and biographical notices. In three volumes.* By Samuel Kettell Boston: S. G. Goodrich & Co. [1829] 3 v.

We all owe a debt of gratitude to the Scottish scientist Sir David Brewster. In 1816, he invented the first kaleidoscope. Over the years, with several adaptations (with significant contributions by American Charles Bush, this device has created new views both literally and metaphorically for many.

The power of the kaleidoscope is that it can arrange patterns out through a combination of perception, action and objects observed. The kaleidoscope also gathers light from a point source through a series of mirrors or objects. This process of illumination through change maps onto a variety of organizational challenges—from human resources issues to mergers/acquisitions to office space design.

Your four-word takeaway:

*Your turn,  
now change.*

### How A Metaphor Can Become A Tool

These constituent elements of the kaleidoscope, or any organizational metaphor, can be mapped onto a tool—basically a set of questions tied to tangible, observed phenomena—for organizational analysis. As a guideline for the practitioner assessing barriers to performance and valued capital in specific work settings, the "SCOPE Creed" could read:

1. Observe specific accessible details
2. Expand upon the specific
3. Measure behaviors and phenomena that are tangible (but not necessarily immediately apparent)
4. Measure analytically (i.e.; deduce/induce conclusions from observations in a fashion that others can follow)

(Continued on page 6)

## S.C.O.P.E. -continued

(Continued from page 5)

Despite different designs, kaleidoscopes share four properties:

1. They can concentrate light to reflect off of objects (sometimes mirrors) so that the reflections form a pattern.
2. They have a mechanism or capacity for rotating (i.e., turning/changing) that shifts what the viewer sees.
3. The observer views a pattern that is the unique interaction of reflected light, instrument design and objects viewed.
4. They help the observer experience wonder and delight in the everyday world.

You can use the kaleidoscope idea to observe the internal and external processes of organizations that impact on organizational functioning:

- Cultural/political relationships
- Consonance of diverse units/staff
- Organizational behavioral patterns and trends
- Change management
- Significant local, regional and global cultures
- Delight and wonder at achievement

### ***Not the First One: Kaleidoscopes Galore!***

"It is astounding that one basic concept involving a simple set of mirrors, with an eyepiece at one end and an object cell at the other, can produce such a limitless variety of creative ingenuity,"—Cozy Baker "First Lady of Kaleidoscopes." founder of the Brewster Society (quoted in Gilbert, 2001)

Feminist theology. U.S. drug policy. Biological evolution. Information system design. Diversity training.

The kaleidoscope has become a popular metaphor for a variety of aspects of human experience. The concepts of discontinuous change, multiple facets and the shifting relationships of bits and pieces touch on many aspects of our work and our lives. Performance improvement is just one more arena where the metaphor applies.

A kaleidoscope of kaleidoscope metaphors:

"But change we did...I spent so much of my career ready to fight this enemy and, suddenly, it was gone. We watched the Iron Curtain come down; we watched as Germany unified itself almost overnight; we watched as all those Eastern European nations were told pursue your own destinies; and we watched as the Soviet Union ended. The world we knew just fundamentally went away at that point, and became a mosaic with changing bits and pieces every day -- almost a kaleidoscope. And we come in here to C Street every day, you twist that kaleidoscope and all the pieces change. But there are certain realities within all of these pieces changing in front of us every day, and the realities of that. We beat them on the field of ideas -- we contained them on the field of battle but we beat them on the field of ideas"

—Colin Powell, (Powell, 2001)

"In feminist theology the theoretical subject of method is a relatively recent enterprise. Because of the multiplicity of approaches, the variety of sources, and the complexity of norms, a viable schema is needed to consider the pluriformity and particularity of the mystery of God and the God-world relationship in dialogue with the unity and diversity of women's experiences. A kaleidoscopic model may prove responsive to the challenge of feminist theology and applicable to the broader enterprise."

—(Schaab, 2001, no page)

"It was already clear to me that evolution by selection could not have produced directly, by its own action, the structural changes that mark that evolution. My own view then was that some rearrangement occurred in the nucleus, at the time when a new species was about to be

(Continued on page 7)

Hey, didja know...

"The world's largest kaleidoscope, located in Shandaken, N.Y., is 37 feet tall. There is no eyepiece, but as many as 20 people inside the base can view the image, which is projected downward onto three mirrored panels to produce a spherical cluster of 254 hexagonal facets that appears to be 50 feet across." from Author not available, *KALEIDOSCOPE*.

The Columbia Encyclopedia, Seventh Edition, 01-01-2002.

The kaleidoscope has become a popular metaphor for a variety of aspects of human experience.

## S.C.O.P.E -*continued*

(Continued from page 6)

born, just as a rearrangement occurs when a kaleidoscope is slightly turned. The change probably occurs under some stress of conditions acting upon the parent form (and possibly only after a certain time), as for example might be the case in the slow ascent of a mountain..."

—Willis, J.C. (1942) pp. 161–2

"There is, however, another kind of change--discontinuous change--and I would argue that it provides a more likely model for the way in which real, qualitative drug-policy reform will come. A metaphor for discontinuous change would be the changing visual patterns in a kaleidoscope. As one gradually rotates a kaleidoscope, the pattern produced by light reflecting off the bits of colored glass remains the same. Eventually, however, a threshold is reached, and any further rotation leads to an unpredictable reorganization of the shards and a qualitatively different visual pattern. No pattern ever merges gradually into its successor. Discontinuous change takes place in complex systems, where multiple forces interact in complicated ways over time so that minor random events may be swept up by multiple feedback mechanisms and rapidly magnified and transformed in startling ways. In chaos theory, for example, this is referred to as "sensitivity to initial conditions," or more popularly as "the butterfly effect." — (Fish, 1994, no page)

"If the [gravitational] lens is not a single galaxy but an entire cluster of galaxies, the image can be a kaleidoscope of strongly distorted arcs and arclets. The first giant luminous arcs were discovered in 1986 independently by Roger Lynds of National Optical Astronomy Observatory with Vahé Petrosian of Stanford University and by Genevieve Soucail of Midi-Pyrénées Observatory in France and her colleagues. Almost 100 such arc clusters have been identified so far, one of the most dramatic being cluster Abell 2218. With the help of these images, astronomers can reconstruct the mass distribution inside the cluster."

—from Wambsgans, 2001, no page

"Recognizing that optics is not limited by the same constraints as electronics, Frietman designed a system that allows full interconnection without the scaling problem of wires. In it, each processor sends out information through an array of light-emitting diodes, one diode for each bit. A bundle of optical fibers, with one fiber for each LED, is used to move light around. The light enters the fiber at the processor end and comes out at a central node that Frietman calls the "kaleidoscope," which consists of a faceted mirror and lens system. Because the fibers are organized in an array, their relative positions are the same at the output and input. The data, therefore, can be thought of as a 2-D image leaving each processor. What the kaleidoscope does is consolidate all this incoming information and send it back out to the processors..."

—Bains, 1997, no page available

"...always waiting for tomorrow/and a twist of fate,/a ray of hope...with the faintest/sleight of hand/the alteration of all life's schemes and all its scope.../all with one tiny turn of life's kaleidoscope."

—Danielle Steel (Steel, 1987, preface)

"It was so much more difficult than he thought,/not just bricks and mortar but wives and children./There was no commanding the kaleidoscope to stop./The pieces kept on falling in and out."

—from "The Architect" by Karen Swenson

**"...O singers of the sunset! is there naught  
Remaining for the muse, but just to fill  
Old skins of fable with weak wine of thought?  
The child, Imagination, at his will  
Reshakes to wondrous forms of beauty still  
A few bright shards of common joy and hope,  
And turns the world in his kaleidoscope...."**

—Trowbridge, J. T. "Guy Vernon" from Trowbridge, J. T.: [Poems, in] A masque of poets (1878): a machine-readable transcript

### **PATTERN RECOGNITION AT WORK**

1. One stands alone...as you observe a particular workplace phenomenon, take particular note of what seems to stand out—this exception can reveal the rule.

2. Connect at the edge: Sometimes pieces don't always fit, but we can find connection between these elements often at the point of contact, which can be at the extreme (the edge) of behavior. In a stressed environment, the points of contact become conflict and in this conflict the connection between actors is revealed and ideally the conflict is defused.

3. Find multiple patterns: Challenge yourself to turn again, even after you have found a pattern that makes sense. New patterns and insights emerge.

4. Point to the light. Your best efforts at pattern recognition can go astray if you aren't oriented to the source of power (i.e., "light") in an organization. Remember, sometimes performance improvement professionals are directed away from the actual sources of organizational power for political reasons, which can limit your ability to observe the true behaviors in a setting.

5. Strive to find wonder. Despite all the reasons people shouldn't "fit" together, it's still pretty amazing we manage to have successful organizations. Take time to acknowledge this to your group. The evershifting patterns can inspire hope and delight.

(Continued on page 8)

## S.C.O.P.E. -continued

(Continued from page 7)

"...See, my cantabile! these, and more, are flashing to us from the procession;  
As it moves, changing, a kaleidoscope divine it moves, changing, before us. "

Walt Whitman (1819-1892) *A Broadway Pageant: Reception Japanese Embassy, June, 1860.* from  
Whitman, W.(1872) *Leaves of grass* (Washington)

### ***The Crystal Question: How will we change?***

"Not at all; I rather think 'twill be an advantage. The brain, after all, is something like a kaleidoscope and a momentary shaking may enable its particles to take a pleasanter form." — Beau, in "The Four Sisters: An original farce in one act by Bayle Bernard", by Bernard, William Bayle (1807-1875)

We often expect to change the world from without. The lack of clarity in our own mind can be a profound challenge to our ability to analyze the complexities in the world around us.

Often we can get stuck as we try to improve workplaces. Many people fret when confronted with environments of constant change. While the change can be unsettling, if we can find meaning in the patterns that emerge we can shift from sheer terror to satisfaction and delight.

For a quick glance at organizational dynamics, I recommend that practitioners ask a simple crystal question (for more on "The Crystal Question" see (Packer, 2001)), in this case, a question asked at the point of wonder:

How will we change?

The organizational patterns that we see and influence have a profound impact on our view of our work settings. If we recognize how we can order and re-order the elements in our setting we can begin to find meaning in seemingly random aspects of behavior.

Some patterns you may find organizationally:

- Where do people gather?
- What do people do?
- What has meaning here?
- How do people speak?
- What works here?
- Who controls change here?

You can use a Kaleidoscope job aid and find your Consonance—Dissonance—Resonance.

You can use your Kaleidoscope tool on other environments—in its own right and as a means to combine evidence from your other "scopes"—through methods such as:

- Observe the same team in different settings, like both at work and at a party
- Find similar trends and best practices in other workplaces through academic and internet research
- Note common words, phrases and themes that people say
- Assess organizational habits, like coffee preferences

### **A case example:**

To assess the functioning of several social service programs considering a formal alliance, I designed a questionnaire to assess needs and opinions of key decision-makers. At the end of each interview, I added a question to help me understand how people view patterns in their setting. The question: "How would you describe <this alliance> as an animal or natural phenomenon?" elicited a variety of powerful and significant descriptions. While many of the metaphors selected reinforced responses to general questions, the clarity that the metaphor provided (as far as examples of isolation, precariousness, and struggle) helped create an accurate picture of the challenges of the alliance. I was then able to identify elements in the organizations that were consonant, dissonant and resonant with specific themes that mirrored behavior that impacted on the successful functioning of the alliance.

(Continued on page 9)

## S.C.O.P.E. -continued

(Continued from page 8)

### **Your world, what color?**

"There is no end piece containing color, only a clear lens that turns everything it is pointed toward into a kaleidoscopic image. Brewster referred to the teleidoscope as the purest form of a kaleidoscope, because the viewer is not limited by the objects in an endpiece. Rather, the whole world becomes his kaleidoscope. It's been said that the ultimate value of the teleidoscope is the potential each viewer has to see the artistic value in his own environment." from <http://www.brewstersociety.com/kaleidotypes.html>

Yes, we are at the end, but you are not. There are a variety of "scopes" out in the world that you can use to improve organizations. I urge you, test the "scopes" we describe here, then adapt them so you can:

- Design your own instrument
- Observe and collect illumination (i.e., "shed light on your challenges")
- Change your view
- Note the emergent patterns

Now go try this. Let me know what happens.

### **WYDSIWYG: What You Don't See Is What You Get**

As with any successful organizational intervention, how you evaluate the information collected will dictate the value of the tool that you use. Some criteria that may be useful for evaluating the Kaleidoscope metaphor include:

1. In observing specific examples of organizational phenomena, are you able to observe aspects that have not been seen by others?
2. Are the causes for gaps in performance made more or less clear by your analysis of what you observe?
3. Can others in the organizational setting use similar tools to observe similar phenomena?
4. Can you convey your analysis in terms that have both symbolic and literal value and meaning for the key decision-makers in the setting?

Any tool for observation and analysis has profound limitations. Throughout this series, I hope to convey a new way to look at organizational dynamics with CPS, with the caveat that these are adjuncts to, not replacements of, the standard tools in use for performance analysis and improvement. Successful interventions benefit from a wide array of perspectives and tools from internal and external experts.

Metaphors can have a downside, too. It can be quite tempting to embrace a single approach because of its power to illuminate one aspect of performance, while ignoring other approaches. A diagnostic metaphor without organizational meaning and value can at best be a waste of time for organizational members and potentially result in costly delays in improving performance (as well as discrediting the practitioner).

Skilled practitioners balance their roles as observers, advisers and participants to help individuals ethically achieve organizational goals. Mistakes can and probably will happen, and a tool that worked quite well when observing one phenomenon becomes useless when applied to another. Make sure you have organizational checks and balances so that you do not get so wrapped up in your analysis you ignore the needs of organizational members.

And thank you for joining us on this journey in pursuit of performance excellence!

[Note: Poems and some references in this article were found through various on-line databases., accessed on location and remotely through the Cleveland Public Library.]

Would you like help with training creatively, defining your vision, and making complex performance improvement efforts clear for decision-makers as well as participants? Then contact Todd Packer today!

As an independent applied creativity consultant, Todd Packer can help you safely, strategically, and successfully explore organizational mess. His unique, innovative, and customized techniques reduce stress, improve morale, generate solutions quickly, and achieve measurable outcomes.

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## ISD—A Powerful Approach When Used Well: A Response to Recent Criticisms By Charlie Beagles and Steve Griffin

### *Criticisms of ISD*

In its April 2000 issue *Training* published "The Attack on ISD: Have We Got Instructional Design All Wrong?" This article identified four major criticisms: (1) ISD is too slow and costly for modern work and the modern workforce; (2) ISD claims to be a technology for developing instruction, but it is actually an approach to project management, and does not prescribe steps necessary for building effective instruction; (3) ISD "rigidizes" and trivializes work processes, and turns out homogeneous robot workers and boring training; (4) ISD prescribes what is to be learned, rather than allowing adult learners to construct their own learning.

This article provoked intense response. Almost two years later (February, 2002), *Training* followed with "A Hard Look at ISD," which provided opinions as to whether problems experienced in ISD are inherent to the process, or are caused by misapplication of the process.

There have been several responses to the latest *Training* article, including the brief and effective rejoinder by Guy Wallace in *Pursuing Performance* (Spring, 2002). This article provides a data-based response, in that it reports on a long term ISD program that has delivered training, performance support, and testing products in use by thousands of trainers and adult learners nationwide

### *Background –ISD at the Veterans Benefits Administration*

For the past eight years, the Veterans Benefits Administration (VBA), part of the U.S. Department of Veterans Affairs, has been applying ISD to train highly complex cognitive tasks to a workforce distributed among 58 regional offices.

In the early years, prototype analysis and training modules were produced. When they proved effective, the effort was expanded. As a result, a wide variety of jobs and tasks have been analyzed and training and performance support initiated or completed, including jobs in compensation and pension benefits processing, adjudication, and rating; insurance services; and loan guaranty services.

Due to the high-cognitive nature of VBA jobs and the requirement to provide nationwide training, VBA designed a training and performance support system that is networked, multimedia, and multi-method, based on multilevel needs assessment and on a five aspect job and task analysis (behavioral, cognitive, metacognitive, affective and work process flow) and on learning analyses which synthesize behavioral, cognitive, metacognitive, affective, experiential, cooperative, and adult learning approaches.

The system integrates a variety of delivery technologies, media, and methods (intranet-based training—both individualized and cooperatively structured; videoteletraining; electronic performance support systems (EPSS); classroom-based courses; case studies; job aids; desk guides; CD-ROMs, and performance tests).

Formative and summative evaluation is an important aspect of the ISD effort at VBA. Extensive trial and validation activities for both training modules and EPSS are included in the task orders we award to our development contractors. Performance tests are built, validated, and tested for reliability. Once products are fielded, continuing evaluation examines achievement of training objectives in the field implementation, performance of jobholders in the field, impact on organizational effectiveness, and return on investment.

The results have been noteworthy: approximately 98% of trainees who complete the modules successfully complete the demanding multi-hour performance tests associated with each module. Training time, when compared to previously existing on the job and classroom training, has been reduced by over 50%. A Medical EPSS has reduced medical referencing inquiries from 7 minutes to 10 seconds, for a savings of 98 work years annually across the VBA.

Efforts continue today to analyze and develop training and performance support for additional business lines and jobs within VBA. Figure 1 illustrates the VBA's training systems development process, including the use of ISD.

Instructional Systems Development (ISD), long a mainstay in adult technical training development for government, military, and industrial applications, has recently been criticized as

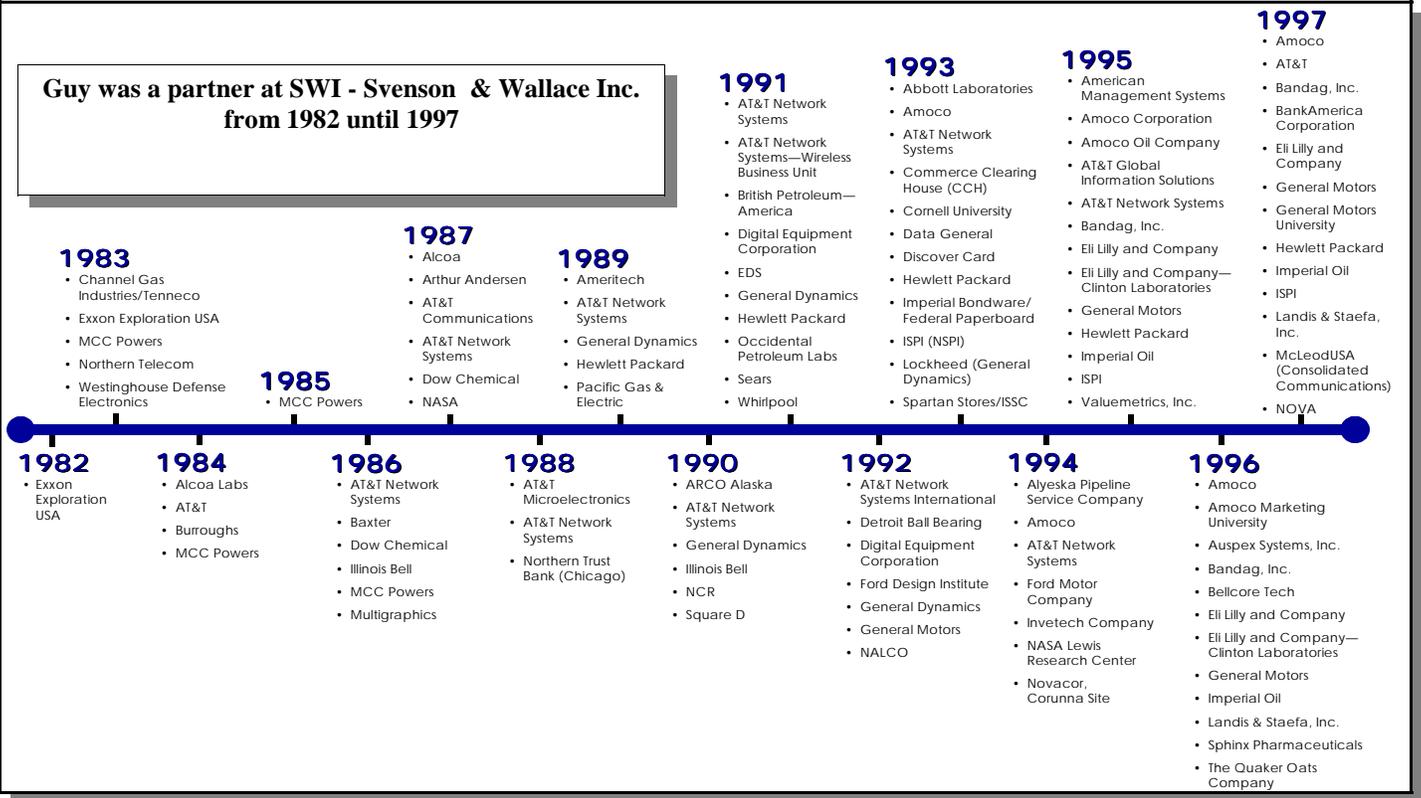
- (1) too slow and costly for modern work and the modern workforce;
- (2) failing to provide a technology for developing instruction,
- (3) "rigidizing" and trivializing adult learning; and
- (4) prescribing what is to be learned, rather than allowing adult learners to construct their own learning.

This article discusses these criticisms and provides examples of when ISD is and is not an appropriate choice for an organization. It also provides a case study of a successful application of ISD. The application involves training and performance support of complex cognitive adult tasks for employees in the 58 regional offices of the Veterans Benefits Administration (VBA), a part of the U.S. Department of Veterans Affairs. Data on training effectiveness and reduction of training time are provided.

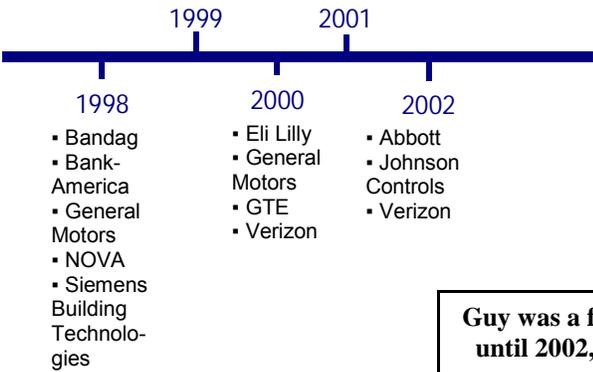
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# Guy W. Wallace's Clients 1982-2002

Guy was a partner at SWI - Svenson & Wallace Inc. from 1982 until 1997



- Bandag
- Eli Lilly
- General Motors
- H&R Block
- Fireman's Fund Insurance
- Verizon



## EPPIC Inc.

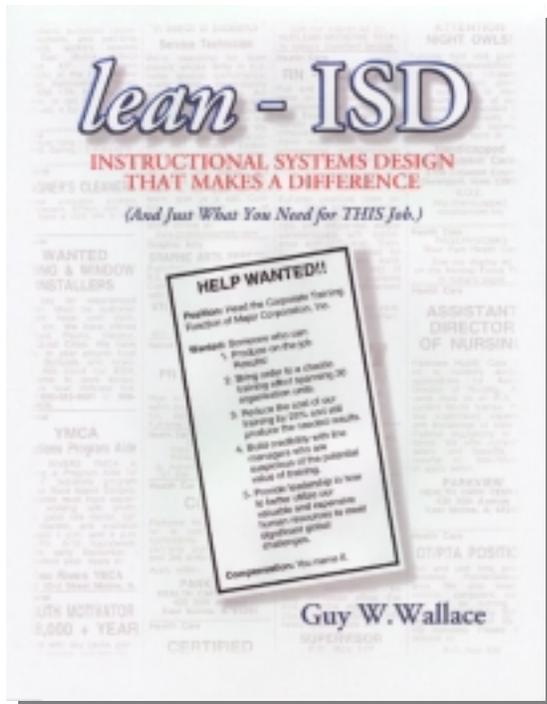
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Guy was a founding partner at CADDI Inc. during 1997 until 2002, and started **EPPIC Inc.** in September 2002

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## ISD—A Powerful Approach When Used Well: A Response to Recent Criticisms

(Continued from page 10)

### The Four Criticisms—and Responses to Each

In the following sections, we will reflect on how each of the four ISD criticisms relate to our experiences in developing ISD-based training and performance support systems.

“too long and too costly to do to what?” and “too long and too costly compared to what?”

#### Criticism 1: ISD is too slow and costly for modern work and the modern workforce.

**Response:** Two questions must be asked in response to this criticism: “too long and too costly to do to what?” and “too long and too costly compared to what?”

Let’s examine the “too slow” issue first.

In an example cited in the April 2000 issue of *Training*, a company had to triple the size of its field service force in 90 days, because of the sales of a new piece of equipment. The article noted that ISD personnel would not touch the problem, due to the time frame. The non-ISD solution presented cited by *Training* was the hiring of new personnel already experienced in similar work, then having existing service personnel mentor the new personnel for a few weeks.

Although there was no indication that the proficiency of the new trainees was in any way established, the solution was deemed “good enough” and responsive to the company’s marketing personnel. (Note: The description of the example did not explain why—if some field service personnel already existed—there was not an adequate training program already in place, with work processes clearly documented, and appropriate practices and tests in place. If there was no training in place for the already existing

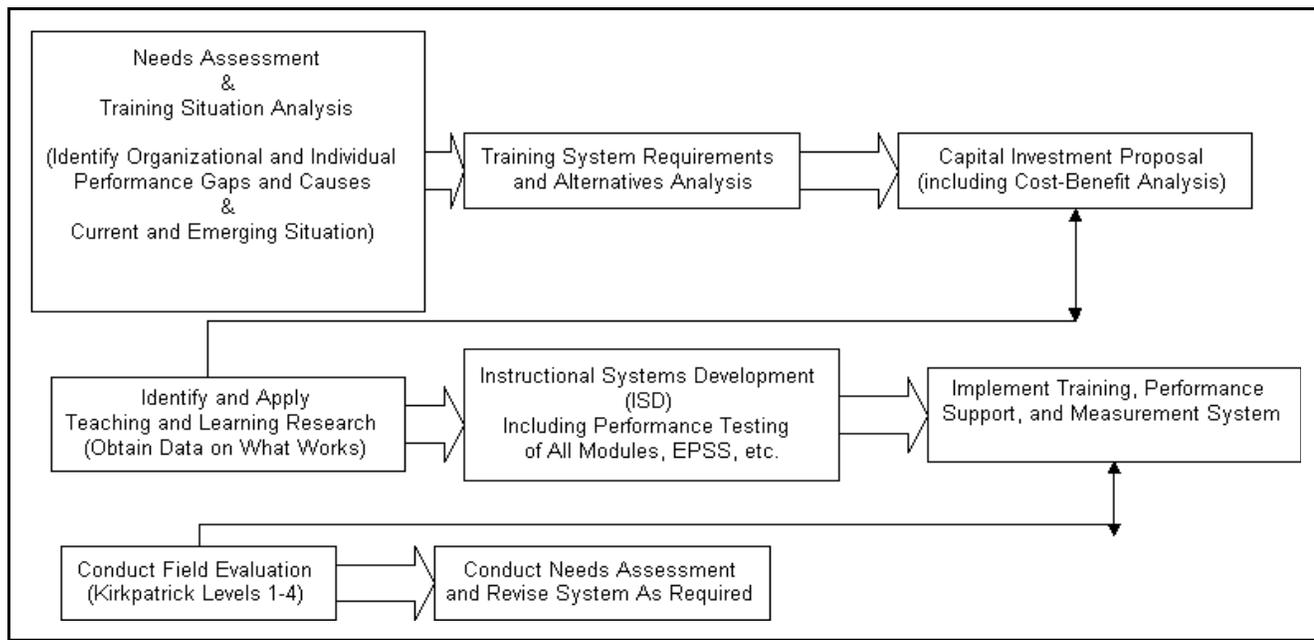


Figure 1. VBA Approach to Training Systems Development<sup>1</sup>

<sup>1</sup>From Griffin, S. and Beagles, C. “Training and Performance Support Systems (TPSS): A Case Study from Needs Assessment to Return on Investment, *Educational Technology*, Sept-Oct 2000.

personnel, it seems a bit late for the company to worry when new personnel were required, then to

(Continued on page 14)

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blame ISD for its situation.)

If an organization's demand is for a quick fix then ISD is not the answer. All organizations encounter situations that require a quick fix. Some situations are caused by unforeseen circumstances. A flaw in the organization's decision-making process, whereby the training impact of marketing, engineering, or management decisions made is not part of the organization's risk assessment process, causes other situations. Regardless of the cause of the quick-fix requirement, ISD cannot normally be done in 90 days.

We have found that job and task analysis of a major job usually takes approximately nine to twelve months, after which training development, trials, and validations can occur. Development of VBA ISD-based training and performance support products typically takes from nine to fourteen months, but the components of these modules are very extensive. They include performance tests (and test variants) at the lesson and module level—tests that have undergone validity and reliability assessment. They also include trials and validation with target audience populations before the products are fielded. The times listed above can be reduced if certain ISD activities have already been performed, for example, if task analysis is completed and available.

Times can be reduced if the project scope is smaller than an entire job—a single task, for example. Times can be reduced if expert instructional designers are available who can mentally perform needs assessment, a quick and dirty (and top level only!) task analysis, learning analysis, and media and method design in a matter of hours or days. However, all possible time reduction factors added together do not allow for ISD development of a job training course, including production, tryout, development and testing of performance certification and validation of training effectiveness, in 90 days.

Some would argue that an 18 to 26 month time frame for building a training system—from analysis to fielding—regardless of how comprehensive or effective the system, is simply too long for a rapidly changing world where processes and products are constantly changing. However, if an organization is truly working in such a competitive, frenzied environment that there is no time to document processes as new products are rushed to market, then neither an ISD-based nor any other real training system is appropriate.

Organizations in such frenzy, however, must consider the long-term effects of **not** documenting and training processes to proficiency: effects on production personnel, product quality, support personnel, managers of new field offices, customers, and the organization itself. Some of those organizations which are most pressured to field new technology first seem also to be the most volatile in terms of long term value.

Just as everyone has seen quick-fixes, everyone has seen situations where there was never time to do the training systematically, but there was time to apply successive quick-fixes over a period of several years as a succession of managers tried to address performance problems caused by never establishing a training/HPT program which results in proficient employees who consistently produce quality products.

This has been termed the approach of "quick fixes, faddish solutions, and well meaning but ineffective planning of programs and projects" (Kaufman, Watkins, and Leigh, 2001, pp. xv-xvi). In the example presented in *Training*, what is not discussed is the potential effect of sending potentially non-proficient service technicians into the field. The effects may not show up in the short term, but they will show up. And they are likely to have very expensive consequences.

If ISD is not appropriate for quick-fix situations, when is it appropriate? It is appropriate where an organization has a permanent, long term requirements to train its employees in the critical tasks of their jobs, and where job processes are reasonably stable. Concerning the requirement for stable content, we have found that ISD works well even in an environment of change, as long as fundamental processes are stable.

For example, although medical, legal, and procedural changes frequently impact VBA processes for adjudicating veterans claims for benefits, the underlying process remains: identify issues affecting the veteran, seek and evaluate evidence supporting the veteran's claim, determine the award allowable under the law, etc. Using intranet-based training delivery, we can quickly distribute changes to modules, EPSS, and performance tests.

(Continued on page 15)

## ISD—A Powerful Approach When Used Well: A Response to Recent Criticisms

*(Continued from page 14)*

In many cases, a reasonable approach to a training requirement is to develop both a short term and a long-term training and proficiency measurement set of tactics. ISD would be the appropriate tool for the long-term strategy. If an organization makes an investment in the foundations of ISD, that is, needs assessment and related job and task analysis, then when that foundation is laid and the next crisis comes, the organization will be able to respond with a training program that is more likely to result in proficiency.

Now let's look at the "too costly" criticism of ISD. In order to determine whether a training product is too costly, the organization must answer two questions: "What does the organization require the product to do?" and "What benefit is obtained for the money spent?"

The desired capabilities of a training product are an obvious cost driver. For example, an ISD-based product that includes valid and reliable performance tests, and variant tests for personnel requiring remedial training, will cost much more than a classroom or video lecture with no testing at all, or with only multiple choice testing. If all the organization requires is information dissemination, then ISD is not appropriate. If, however, the organization desires measurable employee proficiency in job tasks, then the investment in ISD is worthwhile.

*Development costs* of VBA's ISD-based training modules are approximately \$9000-\$12,000 per student hour of training and testing. Since products are reusable by thousands of trainees nationwide, *training costs* consist of labor costs for trainees and facilitators. Direct training development costs are recovered many times over in indirect cost savings from reductions in training time, on the job mentoring time, travel costs, and costs of duplicative training development across all regional offices.

Thus far, VBA's ISD-based modules have reduced training time by over 50%. Significant reduction of

*"What does the organization require the product to do?" and "What benefit is obtained for the money spent?"*

Table 1. Sample of Typical Performance Test Results for VBA ISD-Based Modules

Module	Pretest		Posttest	
	Pass	Fail	Pass	Fail
Rating Appealed Cases		19	18	1
Rating Compensation Cases		19	19	
Rating Pension Cases		19	19	
Rating Death Indemnity		19	19	
Rating Routine Future Exam Cases		15	14	1
Rating Hospitalization and Convalescence Cases		16	16	
Rating Due Process Cases		10	10	
Insurance Processing		19	19	
Adjudicating Compensation Cases		10	10	
Adjudicating Dependency Cases		20	20	
Adjudicating Pension Cases		18	18	
Adjudicating Income Adjustments		18	17	1
Adjudicating Death Pension		18	18	

training time has long been documented as a benefit of ISD-based multimedia training (Orlansky, J. & String, J., 1977; Fletcher, D., 1989; Hall, B., 1995; Griffin and Beagles, 2000). The modules have also been very successful in increasing employee proficiency, as measured by pre-training and post-training performance tests. Table 1 shows a sample of VBA module pre-fielding testing results.

*(Continued on page 16)*

(Continued from page 15)

The same level of effectiveness has occurred in field use of these training modules. A recent data “snapshot” from our national training database shows that of 1,850 trainee completions of modules, 1,826 were “pass” and 24 were “fail,” a pass rate of 98%+ on these extremely demanding performance tests.

Table 2. VBA ISD Activities and Their Effects (Continued)

Module pretest available	Allows employees who are already proficient to avoid attending training they don't require, on a module-by-module basis.  Also allows current jobholders to get an indicator as to whether they require refresher training.
Posttests available at lesson and module levels	Allows trainee to identify areas in which he or she is lacking proficiency before getting to the next lesson or module or the end of the course. Improves learning, reduces frustration and rework.
Test variants available	Allows valid testing of proficiency for trainees who require remedial training and retesting
Selection of learning approaches, such as cooperative learning, case-based learning, active learning, and other behavioral, cognitive and experiential learning theories, to train complex cognitive skills and objectives	Ensures that training is meaningful, in depth, and retainable, and is transferable across many different situations.
Trials of the draft learning or performance support product, with a small group of the actual target audience.	Identifies what works and what does not work in the training or performance support product, so that fixes can be made.
Validation of the learning or performance support product, before national fielding, with a large group of the actual target audience.	Ensures that the desired effect (i.e. proficiency will be established, performance will occur)  Avoids surprises (such as unanticipated negative effects)
Usability assessment of non-module products, such as job aids and EPSS	Ensures that the desired effect (i.e. proficiency will be established, performance will occur)  Avoids surprises (such as unanticipated negative effects)
Follow on evaluation (evaluation of training graduates in actual regional office environments)	Ensures transfer of training skill to the job itself.  Identifies any non-training variables which impact the transfer of training skill to the job itself.  Ensures that the training coverage is sufficient in scope to allow success on the job.
Use of a national sample of VBA personnel for each activity above.	Ensures that a consistent, consensus approach is taken to answering such questions as “What are the tasks? How are they done? What are the task standards? Are the products usable in all regional offices?”

(Continued on page 17)

## ISD—A Powerful Approach When Used Well: A Response to Recent Criticisms

(Continued from page 16)

### Criticism 2: ISD claims to be a technology for developing instruction, but it is actually an approach to project management, and does not prescribe steps necessary for building effective instruction

Note: This criticism, as presented in the two *Training* articles, actually includes at least three issues. The first is that ISD does not provide sufficient guidance on how to do each step listed in the ADDIE (analysis, design, development, implement, evaluate) model. The second is that ISD is too rigid and attempts to take a cookbook approach to the art of training development, which results in an over-focus on process rather than on the outcome (the resultant training). The third is that since good training can be created without the use of ISD, then obviously ISD is not what it claims to be, i.e. a necessary approach for all training development.

**Response:** We will examine these issues one at a time. First, however, a summary response: the authors of the *Training* articles send forth an ISD stalking horse which they have burdened with examples of poor instructional design practices. They have labeled the horse “ISD.” Then they emerge from behind the horse, proclaim it ready for the glue factory, and present their replacement— “coaching, open classrooms...web-based forums” (Gayeski, cited in Gordon and Zemke, p. 53) or “a learning model based on the idea that we’ll all just figure things out together.” (Gordon and Zemke, p. 53). The reader must keep in mind that ISD is not necessarily what the authors say it is.

Concerning the lack of instructional design detail of ISD, we are not aware of any ISD model or theorist claiming to provide in one ISD diagram or book everything an instructional designer has to know and do in order to develop effective training. For example, consider the ISD model known as IPISD (Interservice Procedures for Instructional System Development), designed to guide development of military training. The IPISD model is one of the most prescriptive ISD models.

Our experience with IPISD, accumulated during years of Army, Navy, and Marine Corps training development, was that the model was accompanied by reference lists and by excellent training courses taught by people like Gagne, Mager, and Deterline. These courses emphasized a flexible and intelligent application of the model’s steps, and the importance of further study and training of developers. In our VBA projects, we have found that an effective training program and an effective resource library include many volumes on ISD processes, such as needs assessments (not just “wants” assessments), job analysis, task analysis, etc. We work to ensure that our own staff and our contractors have sufficient training and a sufficient library.

Although ISD models do not themselves contain every detail (steps, sub-steps, sub-sub steps, etc.), we find that the models do include the major activities required for development of effective instruction. Table 2 describes some key ISD model activities used in VBA, and their purpose:

Concerning the issue that ISD attempts to “cookbook” what is a complex art, we have concluded from our experience that excellent training design, like cooking, is a mixture of science and instinct, and that research-based procedures can be developed, updated as new research emerges, taught to the training development professional, and applied in a way that will consistently result in effective training. Our effectiveness studies of years of ISD-based training support this conclusion. We acknowledge that some organizations have provided detailed cookbook procedures in the hope that untrained personnel could then turn out consistent and excellent training, based on the cookbook alone. This approach does not work.

We also acknowledge that there are examples of overly slavish adherence to one ISD model or another, and that some practitioners have emphasized process to the extent of forgetting about the product—the actual training and its effects on the employee and on the organization. However, examples of misapplication do not prove the case against ISD.

In order to keep our “eye on the prize” (better service to veterans) VBA’s ISD processes include multi-level needs assessment to clearly identify needs tied to mission requirements, clear definitions of what will constitute training course success, measurable objectives of behaviors trained, and evaluation of overall course success, accomplishment of training objectives, ability of graduates to perform on the

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job, and effects of trained performance on the organization. VBA's emphasis on multilevel evaluation follows from the Government Performance and Results Act, which requires agencies to measure *outcomes* (in our case, what is the impact on service to veterans) rather than just *outputs* (courses developed, number of employees trained, EPSS fielded, etc.).

Tables 3 and 4 below show examples of how VBA links multilevel needs assessment to training requirements and return on investment measures of effectiveness. After training and performance support products are fielded, follow-on evaluation determines whether the desired effects are being fully achieved.

Concerning the issue that since good training can be produced without using ISD, ISD is not what it claims to be (a *necessary* approach for all training development), the first question to ask is who is making this claim for ISD—that is, other than the authors of the *Training* articles? We are not aware of any such universally accepted claim by ISD practitioners.

Both "training" and "good training" are terms that mean different things to different people.

Table 3. Example of VBA Needs at Various Levels, and Key Inputs

Mega (Outcomes)	Macro (Outputs)	Micro (Products)	Processes	Inputs
Performance gaps (e.g. gaps in accuracy and timeliness) in overall service to veterans, with resultant consequences to veterans and to society at large.	--Performance gaps in completed rating decisions on veterans' claims for benefits  --Performance gaps in letters and other communications with the veterans	--Performance gaps in ratings of each issue impacting the veteran  --Performance gaps in communications with the veteran	Processes for examination of the veterans' claims, in relation to the law's requirements, require improvements in accuracy and speed.	--Employees  --Training  -Performance support  --Funding  --Other (management, tools, facilities, etc.)
Performance gaps in bringing employees to proficiency affect their job satisfaction and performance, with effects on veterans, employees' families, and society at large.	--Performance gaps in number and availability (nationally) of validated training and performance support products	--Performance gaps in existing training and performance support products.	--Processes in employee training and proficiency certification require improvements in availability and effect.	

There are many types of training and information dissemination requirements, and a formal, fully documented ISD process is not possible in some situations and is not necessary in others. Funding or time restraints may make full application of ISD impossible. Situations where the training requirement is already known and simple, and off the shelf training products are available, mean ISD as a whole is not necessary, although one or more ADDIE functions (evaluation, for example) may still have to be performed. We would only advise that readers examine carefully the criteria used to establish the "goodness" of training not developed via ISD.

In the 2000 *Training* article, an experienced consultant makes the following statement "Nine times out of 10, if you see a great training program you'll find it wasn't created by someone schooled in ISD and following that process." We have no idea what this consultant's definition of "great" is, nor was any data provided on all these non-ISD "great" programs. We do know that this statement does not reflect our experience.

On several occasions VBA has formally evaluated non-ISD training existing in VBA. In 1993, at the request of a VBA, a team from the Naval Air Warfare Center Training Systems Division evaluated three

(Continued on page 19)

## ISD—A Powerful Approach When Used Well: A Response to Recent Criticisms

(Continued from page 18)

VBA classroom-based courses. The courses were not ISD-based.

The evaluation reports found significant weaknesses in over 25 areas, including instructor and facilitator skills, consistency, curriculum structure, and evaluation of skills attained. The results were what might be expected in an environment in which subject matter experts have been asked to become curriculum developers and instructors.

(Reference: Bailey, S. S., Hodak, G.W., Sheppard, D.J., Hassen, J.E., 1993.)

In 2001, evaluators external to VBA conducted another evaluation. This evaluation examined two VBA courses that had been assembled in a short time frame to train a sudden influx of new employees.

One course had some segments that were built using

ISD and other segments that were not. The other course had no segments built using ISD. The evaluators found that although both courses provided some benefit to VBA, the non-ISD segments provided no data to demonstrate that trainee performance was improved to the level of proficiency required, and no data to demonstrate positive impact on organizational performance. The non-ISD segments did not measure the performance of trainees after completion of training, did not include performance objectives, varied in content and presentation from site to site, and provided no provisions for remediation and re-testing of trainees who did not reach proficiency. The ISD-based training segments were superior in all of these areas. (Reference: Vanderveen, N. 2001).

Table 4. Linkage of Multilevel Requirements to Return on Investment Measures of Effectiveness

<b>Example: Quality Required by Veterans</b> <b>(Mega)</b>	<b>Example: Legal and Organizational Criterion</b> <b>(Macro)</b>	<b>Example: Rating Document Requirements</b> <b>(Product)</b>	<b>Example: Task Standard from Task Analysis</b> <b>(Product)</b>	<b>Example: Work Process Flow Diagram</b> <b>(Process)</b>	<b>Examples: Training and other available interventions</b>	<b>Example: Return on Investment Measures of Effectiveness</b>
Accuracy in rating veterans' claims	List all issues affecting the veteran	List all issues affecting the veteran	Criterion #39 <sup>(1)</sup>	Work Step 3.14.4 <sup>(2)</sup>	-- ISD modules --Job aids --Quality reviews --EPSS	Increase in employees trained to proficiency in identifying claimed and inferred issues.  Increase in employee ratings accuracy in identifying issues.

<sup>(1)</sup> “All claimed, noted...or inferred disability issues are clearly stated in the Issues section of the Rating Decision document.”

<sup>(2)</sup> 3.14.4: “List all issues to be addressed in the rating decision.”

(Continued on page 20)

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### **Criticism 3: ISD “rigidizes” and trivializes work processes, and turns out homogeneous robot workers and boring training.**

**Response:** Our knowledge and experience indicates that there is nothing in ISD that *requires* rigid work processes, or low-level behavioral objectives. Nor is there anything in ISD that necessitates boring instruction as the outcome. These issues reflect misunderstanding or poor application of ISD, not from ISD itself. VBA’s ISD-based training modules are challenging in what they teach and in how they teach. They include cognitive, metacognitive, and affective objectives.

In the cognitive arena, we train objectives at all levels of Bloom’s taxonomy, with terminal objectives usually at level 5 (synthesis) or level 6 (evaluation). Nor is VBA’s ISD-based training presentation boring. Computer-based training modules include highly interactive, cooperatively structured multimedia, where trainees in cooperative learning groups discuss actual veterans’ cases for practice exercises. Another product—a graphics-intensive electronic medical job aid—assists our employees in understanding veterans’ combinations of disabilities, and the effect of these disabilities.

VBA ISD-based courseware was entered in the Brandon Hall/*Multimedia and Internet Training Newsletter* awards in 1998 and 1999. In 1998 it won the highest award (Gold) for technical training multimedia, and in 1998 it was a medal finalist.

A statement from one graduate of VBA ISD-based modules typifies trainee reaction:

“Using the training package itself is an experience quite different from past computer based learning applications. The concept of cooperative learning played a vital role in my ability to retain what was being shown before us on the computer screen. We were placed into groups of 3 and told that we were to proceed at our own pace and that if one of us failed, all of us did. Failing meant that the three of us would have to go through the testing phase again, after remedial training.

That set a good stage as far as I was concerned that we would use each other’s experience and make sure that each member of the group understood each aspect and phase of the training before proceeding. When I got back (from training), the “co-signer” for my ratings asked: “Did you get anything out of that two week boondoggle?” I told him “I’m not sure, let’s see.” I picked up 5 compensation ratings ranging from simple to relatively difficult. I gave them to him upon completion. He looked at them and all were acceptable without major errors or revision. He said it took him a good 2 years to be able to do that...I saw people in the group that had no experience in doing ratings at all come out of there being able to do them. As far as I am concerned, that says a lot about the training packages.”

### **Criticism 4: ISD prescribes what is to be learned, rather than allowing adult learners to construct their own learning.**

**Response:** The authors of the *Training* article summarized this one part of criticism with the statement that ISD assumes adult employees must be trained on work processes, whereas as adult learners they “are capable of figuring out what they need to know by themselves, or with a little help from their friends.” Well, what the *Training* article views as a vice, we view as a virtue. We like to keep in mind Deming’s sixth point: “Institute Training.

Too often, workers have learned their job from another worker who was never trained properly. They are forced to follow unintelligible instructions. They can’t do their jobs because no one tells them how.” In VBA we found that without ISD, work processes varied from regional office to regional office, because no standard work processes had been identified and promulgated.

Considering that our work is responding to veterans’ claims for health, financial, and educational benefits, wide variance in evaluation of claims was unfair and unacceptable. We also found that we could not afford to allow employees to learn on the job from other employees. This took too long for the trainee (who was processing claims all the while), and it pulled the experience people out of production, causing backlogs of claim requests. In VBA, ISD-based training ensured employees were proficient in claims processing and it reduced training time and mentoring time by over 50%.

The second part of this criticism states that ISD assumes that all job processes can be “prefigured (laid out for the performer) but in fact many jobs today are configured (need to be made up as the performer goes along)” (Zemke and Rossett, 2002). We concur that ISD assumes job processes can be analyzed and trained.

(Continued on page 21)

## ISD—A Powerful Approach When Used Well: A Response to Recent Criticisms

(Continued from page 20)

We do not agree that this assumption prevents ISD development of training for jobs that require the performer to configure processes. This requirement to configure is itself a training objective, one, which appears in many variations in ISD-based courses. For example, one task of our field examiner personnel is to visit mentally incompetent veterans in homes or medical settings, and to meet with them there are examples of overly slavish adherence to one ISD model or another, and that some practitioners have emphasized process to the extent of forgetting about the product—the actual training and its effects on the employee and on the organization their spouse or other representative, and assess whether their financial and other interests are being properly safeguarded. There are so many possible situations which the field examiners could encounter, including violent situations, that not nearly all situations can be trained, and the jobholder must be able to both follow VBA policies and processes, and to configure processes as necessary to meet new and unexpected situations. This ability to configure is trained and evaluated via a wide range of types of situations—simulations that require the trainee to construct processes as required by the job.

### Summary

In this article, we have addressed some recent criticisms of ISD and provided our VBA experiences in the successful use of ISD during the past eight years. Prior to VBA, we had additional decades of experience in ISD application in the Department of Defense, and in large corporations. All our combined experience tells us that ISD works very well when used by trained practitioners who know why they are doing the various ISD activities, and are therefore able to adjust ISD application to particular situations, without giving up critical features, such as determining that a training or performance support product does indeed bring employees to the point of proficiency. Our position is that problems with ISD are caused by misapplication, not by flaws in the ADDIE basics.

ISD is a very flexible approach to instructional design and development, and its application continues to grow and change. Behaviorists, constructivists, and adult learning theorists—anyone who desires to train behavior in the widest sense of the word *behavior*, can effectively use it. However, it is not applicable to all situations.

For example it is not applicable to information or policy dissemination. It is not applicable to organizational events based on open-ended discussion and knowledge sharing with no specific objectives other than “growth,” such as leadership development of senior executives. Nor is it appropriate for supporting life long incidental learning. These latter requirements are better addressed by conferences, electronic bulletin boards, communities of practice, and other approaches and learning models.

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(Continued on page 22)

(Continued from page 21)

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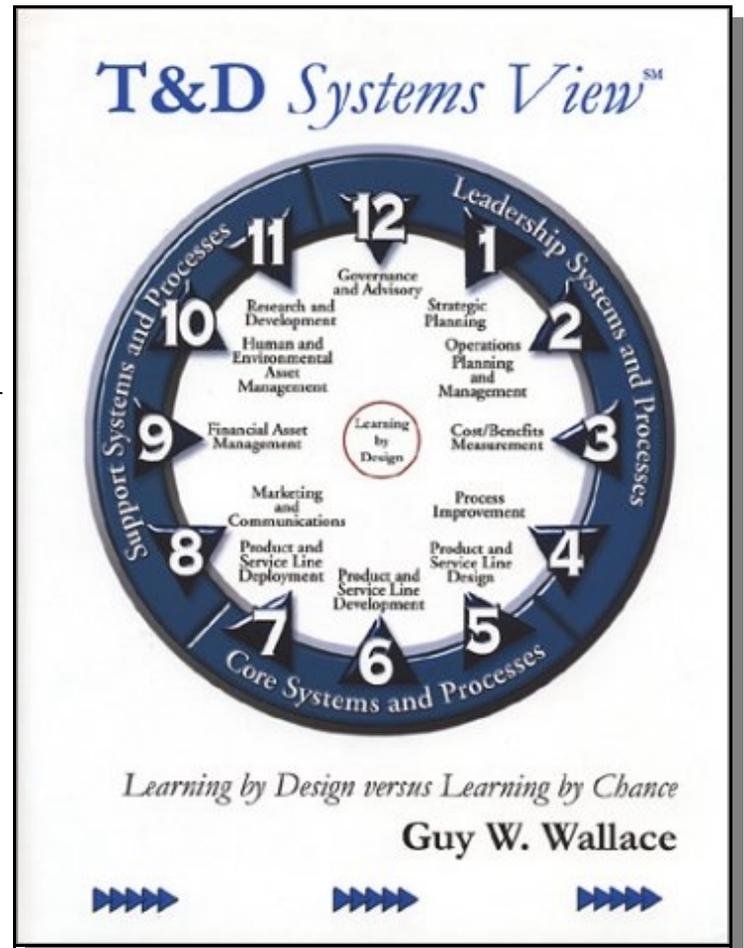
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- \* Performance-based Curriculum Architecture Design Applications: ISPI Conference, March 1998
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- \* Performance Modeling: Michigan ISPI, January 1998
- \* Performance-based Curriculum Architecture Design: ISPI Conference, April 1997
- \* Accelerated T&D Analysis and Design: Chicago ISPI Cracker-barrel, September 1996
- \* Performance-based Curriculum Architecture Design: ISPI Conference, April 1996
- \* Strategic Alignment of the Training & Development System: ISPI Conference, April 1996
- \* Performance-based Curriculum Architecture Design: Michigan Chapter of ISPI, January 1996
- 1996
- \* Encore Presentation: Performance-based Curriculum Architecture Design: ISPI (NSPI) Conference, March 1995
- \* Strategic Alignment of the Training & Development System: ISPI (NSPI) Conference, March 1995
- \* Performance-based Curriculum Architecture Design: Kansas City Chapter of ISPI, October 1995
- \* Performance-based Curriculum Architecture Design: ISPI (NSPI) Conference, April 1994
- \* How to Design a Comprehensive Training Curriculum: Best of America HR Conference and Expo (Lakewood Conferences), February 1992
- \* Total Curriculum Architecture Design: ASTD National Conference on Technical and Skills Training, October 1991
- \* Training Administrative Systems: ASTD National Conference on Technical and Skills Training, October 1991
- \* Management Systems Design for Technical Education and Training: ASTD National Conference on Technical and Skills Training, October 1990
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- \* Building Models and Matrices Using a Team Approach: Texas ISPI (NSPI) Chapter, April 1990
- \* Performance-based Curriculum Architecture Design: ISPI (NSPI) Conference, March 1990
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- \* Performance-based Curriculum Architecture Design—Via a Group Process: ISPI (NSPI) Conference, April 1988
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- \* Performance-based Curriculum Architecture Design—Via a Group Process: ISPI (NSPI) Conference, March 1986
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