When performance and instructional technologists talk: Dialogue about impact, change and personal growth [1]

Allison Rossett
San Diego State University

I'd like to begin by introducing you to three friends:

Joan owns her own custom training firm. Trained as an instructional technologist, she is now successfully writing courses and documentation for large corporations in the US. Sometimes she calls herself an instructional technologist; sometimes she calls herself an instructional designer.

Diana works for the government. Her job is to figure out what the hundred of training professionals in her organisation need and to build a curriculum to meet their needs. She's writing courses; she's delivering courses and she's hiring vendors/consultants to come in and offer what she can't find internally. Her organisation labels her an education specialist.

Gabriel is a happy fellow. Born in Tijuana Mexico, and educated in computer science and instructional technology at San Diego State, he got the job of his dreams at a large, often daring, computer company. He's developing multimedia professional development programs for the computer scientists in his company. His title captures what the organisation wants from him - that he provide instruction to keep technical people on top of technologies and that he use the company's own technologies to do it. Gabriel is an instructional technologist.

I hope their lives sound familiar to you.

_____

1. Address to the Australian Institute of Training and Development on July 15, 1991.

The challenge

While all three live and work in the USA, they are confronting a challenge and an opportunity just like you are. It's innocuous. It comes to you in favoured journals, magazines and from colleagues you might even call friends.

What is this challenge? What is this opportunity? What force do they confront?

It is called performance technology. A pithy phrase, with all the right words and connotations. Who in the 90s wouldn't like words and concepts like performance and technology?

Yet, frankly, in 1991, it is still a career designation with more influence as a dream than a reality.

A colleague tells the tale of sitting next to a gentleman on an airplane who politely inquired about her work. Having recently attended a national conference and being up on the recent journals, she decided to try the new appellation on him. "A performance technologist. I'm a performance technologist." He looked stunned, uncomfortable, and finally collected himself and admitted that there were certainly many men today who needed the kind of assistance that a well trained and sensitive harumph sexual expert could provide.

She gave up calling herself a PT but admits that the clarion call on PT thing has not quieted down. PT is a concept and a perspective that deserves our attention. While we may not choose to call ourselves one, we surely must know what it is and what it means to the instructional technologist, instructional designer and education specialist within.

That's what I'll be up to today.

Instructional and performance technology as kin

As Harold Stolovitch and Erika Keeps point out in the soon to be published *Handbook of PT*, PT and IT have important similarities.

What are they?

- Adherence to a *systems* approach
  What does that mean to us as practicing professionals? Think about the systems on which we rely, our circulatory and reproductive systems, for example. It means defined components. It means orderly steps and activities. It means clear cut purposes, albeit not the same purposes. It means predictable and purposeful effort. It means relationships between the steps, usually data-driven, where the output from one phase serves as the input for the next. In our world that means reliance upon analysis or needs assessment.

Systematic approaches to IT and PT

- clear, predictable purpose
- steps
- order
- data driven activity
- relationships between actions
- output from one step or phase serves as input for the next

Figure 1: Systematic Approaches to PT and IT

- Reliance upon *analysis*

Systematic Approaches
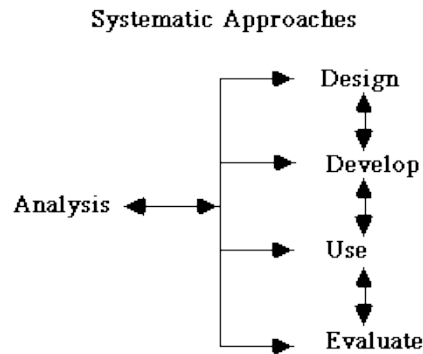
Figure 2: Systematic approaches

PT and IT launch all activities with a searching quest for the details of what ought to be, what is and why there is a discrepancy. The results of this analysis then enlighten all subsequent efforts to solve problems and realise opportunities.

- Possessing *antecedents* in systems, communications, psychological, anthropological and sociological theory and literature.

- Focusing attention on the causes of *performance problems*
  Influenced by the work of Mager and Pipe, Harless and Gilbert, performance technologists and instructional technologists recognise that training can't solve all problems, and that proper solutions are based on what really is causing employees not to do something or to do

it wrong. Think for example about the universal problem of supervisors and performance appraisals. Is it that they don't know how and therefore need training? Is it that the form is confusing, too long, too trivial and needs revision? What happens to supervisors who bother or who don't? Must policies and incentives change? Do supervisors believe that performance appraisals matter, contribute to their and organisational goals? Is it some or several of these causes? Usually. And if so, running another training course won't work. Recognition of this brings PTs and ITs together, and wisely so, in accord about the model presented in Figure 3.

CAUSES	SOLUTIONS
1. Lack of skill or knowledge	Education/training products and services Job aids Coaching, mentoring
2. Improper environment or tools	Workplace redesign Job redesign Organisational redesign Technology innovations
3. Improper incentives	New policies Pay for performance Recognition programs Job redesign Quality and involvement programs Vertical and horizontal career opportunities Management development Development opportunities
4. Lack of motivation	Coaching programs Information about applications Education/training to boost skill and confidence Opportunities to question and discern worthiness A role in selecting direction and content

Figure 3: Pairing causes with their solutions

Kin but not twins

So PT and IT are the same. It's much ado about nothing, right?

Wrong. There are some interesting and important differences between IT and PT.

Let's use the chart that will be your Figure 4 to structure our discussion. I've pulled out some common concerns and attempted to make broad generalisations about PT and IT. I admit to generalising, to stretching to make a few points. But the emphasis and direction definitely match the literature and practice as I've seen it.

ARENA	INSTRUCTIONAL TECHNOLOGY	PERFORMANCE TECHNOLOGY
Goals	Individual skills and knowledge	Business results
Target	The individual	Organisational policies, programs and management perspectives
Activities	Analysis and instruction	Analysis and wider array of interventions
Deliverables	Instructional products and services	Solution systems which may or may not include instruction
Domain	The classroom	The organisation
Vision	Specialist	Generalist
Futures	Needs assessor Multimedia producer Knowledge engineer Developer of distant delivery systems Self-instructional products On demand learning and information Automated instructional design Quality control with vendors Performance technologist	Needs assessor Broker and manager across functions Collaborator Total quality manager Consultant Expert in one intervention or another

Figure 4: Comparing Performance and Instructional Technology

GOALS:

If you ask most ITs why they do what they do, whether work in government, schools or corporation, they'll talk about learning, about achieving instructional objectives. PTs, in contrast, attempt to establish the link between their efforts, business needs and results. While ITs talk about learning, PTs more often talk about accidents or sales or morale or increased cycle time or ...

TARGET:

ITs build courses; they create self-instruction; and all that they do they do for individuals, to help people do their jobs better. PTs usually focus more broadly, as they force an alignment of jobs, tools, policies, skills and business results.

ACTIVITIES /
DELIVERABLES:

Both ITs and PTs base their efforts on analysis or needs assessment or whatever you want to call the activity that enables you to use data and the opinions of stakeholders to figure out what to do.

While analysis is held in common, interventions or strategies are a key difference. Habitually, ITs plan, develop and evaluate instruction. On the other hand, PTs turn to improvements in incentives, job design, selection, feedback, resource allocation, recognition, operating procedures - and sometimes instruction - to achieve business results.

Whether it's expertise, job description or habit, mostly ITs develop instructional products and services. Certainly many ITs have gotten the message, recognising that instruction rarely "works" in an organisation when it is unsupported by other interventions, like management development, performance appraisals and new policies. On the other hand, the PT in no way assumes that instruction is an automatic part of the solution. Rather, he or she looks at the situation and configures a solution system appropriate to the situation.

DOMAIN:

The conventional sandbox of the IT is the classroom, although emergent technologies, of course, are expanding our ken. On the other hand, PTs operate widely within the organization, ranging cross functionally and bringing many kinds of perspectives to bear on the mission.

VISION: Many ITs pride themselves on their specialisation in print or CBT or self-instruction or soft skills or video or management development or... They specialise.

PTs, in contrast, usually provide value to the organisation by having a broad vision, one that sweeps across departments and organisational nooks and crannies, and pastes together the people and resources that will work for a given challenge. We did it for the SD Housing Commission when we fought cockroaches with PT and won. We got the help of specialists, but our perspective and worth to the organisation came from our broad view - from our willingness to leave no stone unturned in the campaign to help public housing tenants battle cockroach infestation.

FUTURES: All of us systematic types need to have a sense of where to from here. I harbour a suspicion that a portion of the ado about PT is generated by ITs who are 10 years into their careers; they want to grow and develop; they've already been specialists and the arenas in which most ITs will be growing do not catch their fancy. Instead, they want to move into more strategic arenas in the organisation. They want to figure out what's needed and convince disparate people to lend their talents and resources to solution systems. Frankly, as they mature, they want to talk to and finagle with executives from sales, marketing, management information systems, engineering, operations...

Some will go back to being instructional technologists because one of the tools or approaches catches their fancy, like Paul Harmon and expert systems, for example, but many will study and grow into better analysts, brokers, or experts at incentive systems or selection or ...

What performance technologists are saying to us

While performance technologist might not be in your career goal, it must *influence your perspective* about the work that you do. A PT frame of mind is a better way for us to do business.

What are PTs saying to ITs? What is a PT frame of mind?

A PT Frame of Mind

- more linkage to business results
- measurement and marketing
- healthy cynicism re: instruction
- alignment of people, programs, policies
- needs assessment as foundation
- intriguing array of interventions
- solutions systems

Figure 5: A PT Frame of Mind

✔ That the relationship between what we do in classrooms and satellite learning systems and CBT and ... must have clear and immediate links to business missions and results - and that we must do more to prove and market that link.

✔ That we must nurture healthy cynicism regarding the ability of instruction to solve all problems.

✔ That instruction rarely solves problems or realises opportunities alone. That the effectiveness of instruction is dependent upon its congruence with aligned programs, policies and people in the organisation. We're all tired of training and beseeching employees to tap dance, only to have them return from the classroom to a supervisor who doesn't know a thing about tap dancing, and an organisation that never mentions it in appraisals, recognition programs and policies.

✔ That needs assessment is the basis for wise recommendations about instruction and supporting organisational strategies, and for enlisting support throughout the organisation.

✔ That our effectiveness in organisations will be based in part by our ability to analyse complex situations, synthesise solution systems and collaborate with colleagues to put them in place.

✔ PT brings closer to us a whole new array of powerful interventions that we need not master but must understand for what they bring to our organisation and to the richness of our palette.

✔ That a PT frame of mind breaks down our separation from the heartbeat of the organisation and insinuates us throughout as analysts, brokers, collaborators and managers. It is not good enough for an IT to write instruction, toss it out to students and pray; he or she must reach out across the organisation to assure the organisation and its people are ready.

What does PT say to Joan, Diana and Gabriel?

Let's look at each of them in light of what PT might mean to their goals, targets, activities, deliverables, etc.

What would Joan, the owner of a custom training company, do differently now that she knows about and appreciates PT? How might she approach her work? ... her thoughts about her future?

And Diana, the government educator. Where does PT take her? Why is she so active in NSPI? What does the influence of PT mean to the way she supervises the trainers who work for her? What has it meant to her career? Where will it take her?

What about Gabriel who works for a large computer firm as an IT? He's younger in his career than Joan and Diana? What does PT say to him?

And you, what does PT say to you?

Conclusion

I'd like you to close your eyes and imagine some siblings you know or have known. Put them in a room. Give them a toy to play with. What happens? What's going on between them? Maybe they're talking, teasing, fighting, joking with each other.

Hopefully, they are also learning from each other. Performance and instructional technologists are also siblings, and like most siblings, all of that is going on between them.

What I tried to do today is to set up that kind of dynamic within you, as an interior dialogue, one that will stimulate thought, interest, concern, possibilities and finally, ongoing professional development.

Performance technology doesn't have to be apart from you. It is useful as an incorporated frame of mind, as each of you continue doing the same job - perhaps a little differently, perhaps a little better.

PT Resources

Carr, C. (March 1991). Social-political systems. *Performance and Instruction*, 41-47.

Geber, B. (January 1990). Goodbye Classrooms. *Training*, 27-31.

Coscarelli, B. (1988). Performance improvement quarterly and human performance technology. *Performance Improvement Quarterly*, 1(1), 2-5.

Harvey, Erik. (March 1987). Discipline vs. punishment. *Management Review.*

Hequet, M. (August 1990). Non-sale incentive programs inspire service heroes. *Reward and Recognition*. Minneapolis, MN: Lakewood Publishing.

Hutchison, C. (October 1989). Moving from instructional to performance technologist. *Performance and Instruction*, 28 (9), 5-8.

Puterbaugh, G, Rosenberg, M. J. and Sofman, R. (November/December 1989). Performance support tools: a step beyond training. *Performance and Instruction*, 1-5.

Rosenberg, M. J. and Powers, E. (April 1991). Performance technology to meet the bear. *Performance and Instruction*, 30(4),1-4.

Rosenberg, M. J. (February 1990). Performance technology working the system. *Training*, 43-48.

Rossett, A. (August 1990). Performance technology in academic programs in instructional design and technology; must we change? *Educational Technology*, 48-51.

Rossett, A. (1987). *Training Needs Assessment*. Englewood Cliffs, NJ: Educational Technology Publications.

Rossett, A. and Gautier-Downes, J. H. (1991). *A Handbook of Job Aids*. Chatswood, NSW: Power and Co.

Spitzer, D. R. (August 1988). Instructional/performance technology competencies. *Performance and Instruction*, 11-13.

Stolovitch, H. and Keeps, E. (in press). *The Handbook of Performance Technology*. San Francisco Jossey-Bass.

Thiagarajan, S. (May 1990). Performance technology and instructional development. *Educational Technology*, 30 (5), 8-11.

Author: Dr Allison Rossett, the author of the award-winning book, *Training Needs Assessment*, co-author of the new book, *A Handbook of Job Aids*, is Professor of Instructional Design and Technology at San Diego State University in San Diego, California and a consultant in performance and training systems to organisations as diverse as the San Diego Zoo, IBM and the United States government.