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MASTERING THE ART OF TRAINING DESIGN

BY CHIP BELL AND TONY PUTMAN

The artist gently thumbs his beard while gazing at the landscape before him. Appearing satisfied, he dabs his brush in the paint and continues his strokes. Presently a landscape emerges from the canvas, glistening in the sunlight, inspired by the artist's vision of his environment. A passer-by observes for a while and finally breaks the silence, *"How do you do that?"* The artist thinks a moment and replies, *"I just paint what I see and feel."*

We all know artists don't look at a landscape and somehow see numbers by which to paint. We *do* know they see the world uniquely. They have a special sensitivity to color, form, hue and space which enables them to capture their experience in some art form.

How does the artist learn to be an artist? How is that artistic perception acquired? Art school can provide instruction in techniques of the craft: the mixing of oils, the selection of chisel for stone or the proper way to hold a woodcarving knife. Yet it is a vastly different set of learning experiences which develops the eye — or soul — of the artist. Here, *professional effectiveness* is primarily a function of personal rather than technical growth. As one noted artist stated, *"What talent I have is derived from what I am, not what I do."*

What has all this to do with learning to be a designer of training programs? Training design requires dual mastery similar to that required by art: mastery of the subjective, "perception" side as well as the objective, "craft" side. Each side, while part of the same whole, is fundamentally different. Each carries its own form of logic . . . its own way of perceiving the world.

Like the painter-sculptor-potter, both perspectives are necessary for effective design. But also like the artist, one perspective clearly takes precedent. Perception precedes action; what you paint *depends* on what you see. Creativity presides over science.

It is not surprising that in our technological world, with its rhetoric of rationality, the "objective" side of training has traditionally been overemphasized. It is like the canvas stretchers guiding the canvas painters! We do not advocate equality here, for we observe that real masters of training design are not an equal balance of the two. Their mastery depends on their art, not their craft. The purpose of this article is to support the professional development of training designers by looking at what is involved in mastering the "art" of training design.

People Logic and Machine Logic

The art of training design requires the logic of people; the craft of training utilizes the logic of machines. This logic of machines has dominated the training world for many years. Central to this logic is the view that learning is fundamentally the result of what the training practitioner does. Despite recognition that learning occurs in the mind of the learner, this logic persuades that the primary responsibility for participant learning lies on the shoulders of the trainer. Inherent in this view is a

kind of objective stability or orderliness which predicts that doing "A" will result in the occurrence of "B."

The emphasis is typically more on delivery than discovery, more on "training" than learning, ultimately on *doing to* more than *being with.* The transference of knowledge and skill is more valued than the fostering of learner inquiry. The learner is viewed passively, as audience, with an air of detachment and languidness. Frequently, the learner is viewed in a somewhat one-down, dependent position.

This technical world is based on prescription. Out of this mechanical perspective, the role of designer is largely that of a technician. Emphasis is placed on looking for the technically best ingredients. Outcomes are predictable in the logic of machines. Objectives are precise, well-written and measurable. Here, instructional strategies are planned in detail, with exact times for all activities. The training program has the feeling of consecutively wired, well-organized events; evaluation is generally scientific.

The logic of people, on the other hand, is a perspective rising in prominence in the training field. The learning world is viewed through a perspective which keeps the human being in primary focus. As we earlier called the machine world the perspective of the technician, a trainer functioning out of the logic of people might have the perspective of a counselor. This world, like that of the artist, is based on observation.

This people perspective defies blueprinting. The designer is less like the cook following a recipe and more like the chef creating a dish from which someone will write a recipe.

The process is learner-centered, rather than trainer-centered . . . self-directedness, choice and acceptance form its core. Because learning, by its nature is about people, the logic of people must guide the logic of machines in designing training. From the logic of machines, one trains the learner; from the logic of people, one nurtures the learning.

Chip R. Bell

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Designing From the Logic of People

Employing the logic of people, the approach to design first starts with recognition that each learner begins at a certain psychological state. That is, at a given moment in time, the learner possesses a certain set of skills, knowledge, beliefs, interests, values and attitudes. There is a recognition that the meaning of learning is for the learner to move to another psychological state. Skills are attained, knowledge increased, attitudes altered or values changed. The designer is aware that the primary function of the learning experience is to foster movement and that it is the *learner* who will make that movement.

Tony Putman

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Design becomes a process of facilitation. First is the development of ways for assessing relevant portions of a person's psychological state at a particular time. Second is the design of activities which facilitate movement to another psychological state. Constant effort is applied toward diagnosing *where* the learner is in the journey from state to state. The trainer must operate with this diagnosis to be accurate when directing movement. Selection of design strategies, methods and devices are all done with the view that movement is the objective while the learner is at the wheel.

Utilizing the logic of people, the designer asks, *"What impact will my design have on facilitating movement to a new state? Will this role-play create resistance to movement? Will this lecture inappropriately slow movement? Will this handout create confusion and movement in the wrong direction?"*

Complementing this concept of movement is the second major perspective of the training designer who uses people logic, that of the importance of human relationships in the learning experience. The quality of relationships among learners can encourage or inhibit movement toward the new, desired psychological state.

An adult learner comes to any learning activity with a unique set of experiences which, in some ways, defines that learner. Designing learning programs which enhance relationship-building among learners enables each to tap the experience of fellow participants. The relationship between learner and trainer is also a key ingredient to fostering movement. A lecture produces a different learner-trainer relationship than created by a facilitator guiding a discussion. The fundamental question for the designer is *"What relationship most amply encourages movement*

at a given point in time?"

The third point of designing from a people logic perspective is the impact of motivation on learning. For some time there has been a lively debate on the importance of participation in learning programs. However, participation is really not the primary issue. Participation is simply one way of getting and keeping the interest and motivation of the learner. In fact, there are times when participation may mire things in a manner which diffuses movement.

The fourth major perspective for the designer is a recognition that ongoing diagnostic work in the course of the learning program is no mere option — it is crucial. Only through ongoing diagnosis can the trainer determine the state of the learner and thus know what learning activity to do next. Too frequently, for example, the trainer learns, while processing a role-play, that the learner was not ready emotionally for a role-play in the first place.

Figure 1.

DESIGNING AND DEVELOPING TRAINING PROGRAMS AND MATERIALS: 16 KEY SKILLS

1. Establishing learning objectives for programs
2. Designing programs to satisfy specific needs
3. Determining program content
4. Applying concepts of human development in designing training
5. Applying adult-learning theory and instructional principles in developing program
6. Evaluating alternative instructional methods (e.g., videotape, role-play, etc.)
7. Developing training materials (e.g., workbooks, exercises)
8. Preparing scripts for films, videotapes, etc.
9. Developing programmed learning or computer-manager instructional materials
10. Determining program structure (length, number of participants, choice of techniques, etc.)
11. Determining appropriate sequences of programs (e.g., prerequisites, curricula)
12. Developing criteria for selecting participants
13. Developing exercises and tests for measurement of learning
14. Developing self-assessment tools (e.g., checklists, exercises)
15. Deciding whether to use an existing program, purchase an external program, or create a new one to satisfy needs
16. Revising materials/programs based on evaluation feedback

Ongoing diagnosis is facilitated by learners sharing the result of what has been done. This gives the trainer a reading on where the learner is and if it is safe to move to the next activity. If the designer has a mechanical perspective, sharing is an activity for its own sake. The perspective of one designing with the logic of people uses sharing for the purpose of understanding what to do next. Sharing also helps learners keep track of their own learning.

Learning Artistry in Design

Your *primary* growth should occur by increasing your understanding of people, rather than design techniques. Of course, learning design techniques — how to write a case study, or behavioral objective, or programmed instruction — are important. And there are many books and courses around to help you. However, unless you have the ability to assess the knowledge, skill and interest of the learner, you will not be able to decide what is required to create movement from state to state.

The objective in learning about people is to educate yourself to appreciate variables which exist when observing people. Variables relate to the observer and the observed. Watch good trainers in action. What do they do that causes noticeable jumps in growth? Be causally aware of which things create movement and which things cause resistance. Notice your own reactions and feelings in the process of sensing resistances.

The resistance to movement by a learner is often due to self-defeating behaviors or erroneous zones (as Wayne Dyer labels them). To the degree that the designer can develop processes in the learning experience which surface games, rackets, self-defeating behavior or inhibiting action, the learner will obtain awareness and strive for improvement. Here, training in psychology, particularly group psychology, can heighten one's perception of people and provide skill in eliminating psychological obstacles to growth.

There are other essential skills required of the training practitioner operating in a design role. Figure 1 provides a list of 16 key skills the comprehensively capable designer should attain. While many appear wholly technical in nature, all have a people logic dimension.

Establishing objectives, for example, can be written so precisely all hope for independent interpretation is eliminated. They also can simply specify outcomes in terms which allow flexibility, creativity and joy.

Developing training materials frequently is done best by first utilizing the logic of people. We have seen materials effectively generate movement by deliberately incorporating incomplete artwork which accurately reflected the tentative nature of the recom-

mendations. (Such an action would make little sense from a technical perspective.) Likewise, small errors in the materials can allow the trainer if necessary to evoke a feeling of humanness not achievable when everything is technically perfect.

Self-assessment tools, tests and instructional methods are all fertile ground on which to sow the seeds of learning. The fundamental task for the designer when developing or revising materials and programs is to constantly seek answers, having asked, *"What impact will this have on helping the learner move toward achieving the learning goal?"*

Conclusion

The playground of the training designer is littered with both art and technique. While our focus has been on creative artistry, we accept the importance of the craft side. Picasso would have been artistically impotent without his paint-mixing, canvas-stretching, metal-twisting technical craftsmanship. It is the form which provides avenue to the expression of substance.

In order to be a master at designing learning programs for people, the designer must "see" the world with the logic of people. Only then can the designer appropriately use machine logic in considering technique.

Artists are creative aerialists — less through technique than perception. All of us can learn to hold a brush and mix paint. Only an artist sees the world in a way which gives birth to masterpieces.*

Chip R. Bell is vice president and director of Management Development and Training for NCNB Corp., a one-bank holding company headquartered in Charlotte, N.C. He has published articles in numerous professional journals and a book entitled *The Client-Consultant Handbook* (Gulf Publishing, 1979).

Anthony O. Putman is a human systems consultant with Human Resource Development Associates in Ann Arbor, Mich. He is the author of *PATHS: A System of Leadership for Objectives* and a speaker at the 1979 ASTD National Conference.

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