# Books

## The Architecture of Words and Thoughts and Things To Know

*Information Anxiety*, by Richard Saul Wurman.

What is "information anxiety"? In his book by that name, Richard Wurman calls it "the black hole between data and knowledge,...the ever-widening gap between what we understand and what we think we should understand."

It is a deadly malaise that creeps up on us, causing us to feel guilty about that ever-higher stack of magazines waiting to be read, depressed because we can't understand our VCR operating manual, and panicked when we hear that the Dow Jones is down 500 points, even if we don't really follow the stock market. We are afflicted when "we read without comprehending, see without perceiving, hear without listening." Information anxiety is a "pervasive fear that we are about to be overwhelmed by the very material we need to master in order to function in this world."

When it comes to information, Wurman says more is not necessarily better. Between telephones, televisions, computers, and FAX machines, Americans no longer need worry about getting or sending information. Instead, today's pressing worry is how to keep from drowning in the plethora of facts, resources, databases, and trivia— and, most important, how to get what we want when we need it.

In 15 extensively annotated chapters, Wurman catalogs the telltale symptoms of information anxiety— the "uh-huh" syndrome, the diseases of familiarity and unnecessary exactitude, adjectivitis and administrativitis, Chinese-dinner memory dysfunction, user-friendly intimidation, and more. Interspersed throughout the conversational prose is plenty of "marginalia"—quotes, news bits, and "thought bubbles" that add flavor and explanation.
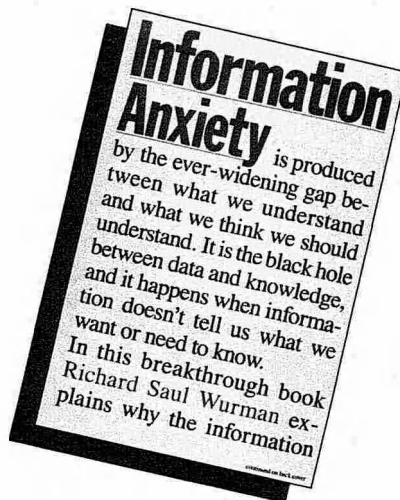


Wurman suggests that words are a form of 'verbal geometry,' that they are what we make of them and can stand for anything we decide to give meaning or value to. His talent and intent is making simple the complex. In the preface to *Information Anxiety*, John Naisbitt calls Wurman "America's premier architect of information." Indeed, the author shows his talent for sculpting and crafting words and meanings.

Wurman's presentation is direct and uncluttered; refreshingly, his tangents always seem to come to a point. He does not waste words or muddle implications. On a range of topics, he says exactly what he means in a way that leaves little room for misunderstanding.

For example, on taking responsibility for the information in our lives, he writes that we need "businesses devoted to making information accessible and comprehensible; we need new ways of interpreting the data that increasingly directs our lives, and new models for making it usable and understandable, for transforming it into information. We need to re-educate the people who generate information to improve its performance, and we, as consumers, must become more adroit as receivers if we are ever to recover from information anxiety."

On communication in the workplace: "Management bears the responsibility to set the communications policy and to create an environment where employees are encouraged to speak their minds." Too often, he says, "employees are kept in the dark under a cloud of buzzword goals that call for them to be in search of 'excellence,' their work rewarded based on 'performance-based coefficients' in a 'market-driven economy' so that the company stays on the 'cutting edge.' "

Wurman quotes tips from the Center for Creative Leadership on achieving better communication:

■ "De-emphasize power differences. The size and position of executive offices can be arranged to keep employee and executive in closer contact."

■ "Create mechanisms that generate constructive criticism. Employees should get to appraise executives as readily as they are critiqued by their superiors."

■ "Serious, loyal, outspoken employees should be encouraged. If your organization contains an individual or two who meet this description, consider yourself lucky; courage has never been rampant in organizations."

■ "Network. Executives, too, can set up the kinds of communication lines their employees have likely [had] for years."

On conveying instructions: "As corporations become more complex, the architecture of instructions plays a larger role as the chain of command lengthens. Most things today are not produced by a single person, but rather by a combined effort. If it is something of worth, information has to be passed from the person with vision to the people who help develop the pieces of that vision. The pieces of that vision have to do with instructions. Successful instructions have about them a sense of anticipation, aspiration, ownership, and even failure."

"Few CEOs," Wurman continues, · 63

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"know how to give effective descriptions, or see the art of description as essential to giving good instructions. The skill of giving orders bears no relationship to giving instructions—one requires tact and diplomacy, the other the ability to communicate, to give directions within a frame of reference that the directee can understand."

Wurman's dry wit, lucid thinking, and ability to break intangible topics into bite-sized pieces help maintain reader interest and involvement and allow for a certain familiarity with the material. He does not restrict himself to the pedantics of information per se—that is, numbers, facts, and figures. Instead, he vigorously challenges us to consider new vantage points ("Everything is within walking distance if you have enough time"), to explore the perspectives of many influential thinkers and doers, and to become aware of our own preconceptions and assumptions, which may be limiting the ways we think about and use information.

Managers may find helpful Wurman's observations on, for example, how we learn: "Learning inherently involves some trauma; it requires a certain amount of exertion and implies giving up one way of thinking for another. Added to this is the puritanical attitude that we are put here on this earth to suffer and that suffering is good for us; therefore, learning shouldn't be too pleasant. . . To avoid suffering 'the pain of learning,' people will go to great lengths to trick themselves with sugar-coated approaches to knowledge in much the same way that those who are fearful of the unknown approach travel: they try to make the trip as easy as possible by having every moment planned in advance, by turning over the arrangements to someone else, by trying to turn travel into a neat package. This deters the traveler from ownership of the experience."

And, on how we solve problems: "There are two parts to solving any problem: what you want to accomplish and how you want to do it. Even the most creative people attack issues by leaping over what they want to do and going on to how they will do it. There are many hows but only one what. What drives the hows? You must always ask the question "What is?" before you ask the question "How to?"

While provoking our thoughts, Wurman also offers practical tips on how to juggle the multifarious pieces of information in our lives:

■ Organize by category, time, location, alphabet, and continuum.

■ "Accept that there is much that you won't understand. Let what you don't know spark your curiosity. Visualize the words 'I don't know' as a bucket that can now be filled with the water of knowledge."

■ "As you learn about something, try to remember what it is like not to know. This will add measurably to your ability to explain things to other people."

■ "Think about opposites. When you have a problem, think of one solution, then of its opposite. When you choose a direction, think about what would happen if you went in an opposite direction."

The best introduction to *Information Anxiety* is to open the book and dive right in; the chapters do not require sequential reading. Wurman writes not to an industry or a specific group; he writes to us all—anyone who uses, loses, or abuses information.

"We don't invent information," he concludes. "We allow it to reveal itself as it marches past. The parade must be encouraged, so that we can develop marvelous new organizational patterns that spark new understandings."

Wurman is president of The Understanding Business and co-owner of ACCESS© Press Ltd., which publishes the Access travel guides.
*Information Anxiety.* 350 pp.

New York, NY: Doubleday, 516/294-4561, $19.95.
*Circle 180 on reader service card.*

## ▎A Blueprint for Sales Success

*The Sales Training Handbook: A Guide to Developing Sales Performance,* edited by Robert L. Craig and Leslie Kelly, and sponsored by ASTD's Sales and Marketing Professional Practice Area.

Increasing world competition, technological breakthroughs, a volatile domestic economy, and a rapidly evolving workforce are causing more and more companies to acknowledge the importance of training and development to bottom-line sales and profitability. Effective sales performance hinges on the competence of a professional salesforce, and as the world market changes radically, so must salespeople change their sales tactics and strategies. In effect, they must recreate the game of selling by anticipating the goals and needs of clients, developing innovative products and responses to those needs, and then strategically changing the way they do business.

*The Sales Training Handbook* is a comprehensive collection of practical, experience-based advice for anyone responsible for the training or management of a sales staff. More than 35 field experts have contributed to this 730-page resource of sales-training know-how. The book addresses the how-tos of

■ determining what training is needed and when;

■ designing and developing the right training programs and materials for specific needs;

■ managing the sales-training function;

■ selecting and training the sales-training staff;

■ using various training methods and media;

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■ measuring and evaluating training results;
■ buying outside training materials and services.

In Section I, which covers the development and management of the sales-training function, James Everd addresses the importance of the sales trainer. "As a professional sales trainer, you simply must not stagnate," he writes. "You must be in a constant state of evolution, keeping your training program up to date using new technologies and responding to the changing roles of sales personnel, changing markets, changing customers, new products, changing management philosophies, and so on. Today's customers are more educated, more sophisticated, and more businessminded. You must develop salespeople capable of dealing with today's customers."

Another author, William Law, emphasizes business planning as a basic component of a sales program. "Your sales-training department must have a working system for assessing company needs and a process in place for responding to those needs that are identified. Sound business planning facilitates this process and helps change the perception that training is little more than another special program on closing techniques, overcoming objections, or negotiating skills."

Section II focuses on developing and administering instructional systems and programs. In one chapter, Franklin Spikes discusses research on adult learning, characteristics of adult students, their learning styles, and self-directed learning techniques. Helpful charts, graphs, and tables summarize the narrative.

Section III outlines nontraditional techniques for implementing sales training, including coaching, self-study, role playing, gaming and simulation, and audiovisual, computer-based, and interactive training.

"Because selling involves a complex constellation of knowledge, skills, judgment, and personal
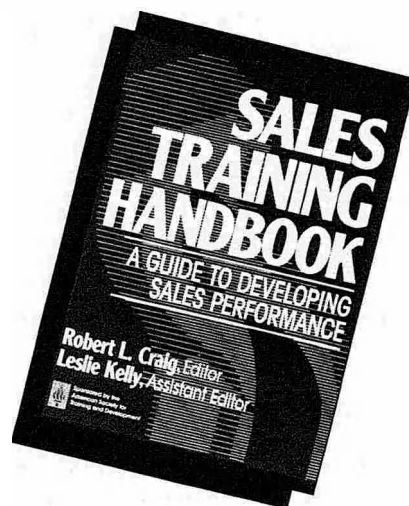
motivation," write Nicholas Ward and Kathryn Wolfson, "it is not something that can be adequately taught through books or classroom learning alone. The evidence is clear that top-performing salespeople learn most of what they do from three key sources beyond the corporate classroom: on-the-job trial and error, observation of peers, and coaching and feedback of sales managers."

Section IV examines, in part, five compelling reasons for measuring results:
■ to determine whether learning objectives are being met;
■ to determine whether learning is transferable to the job;
■ to strengthen future programs;
■ to evaluate instructor effectiveness;
■ to survive in today's business environment.

"There is a growing intolerance with any function that will not or cannot show a contribution to the achievement of the organization's objectives," writes Thomas Currie in a chapter on developing measurement guidelines. "While it may not be possible to prove that learning per se makes a direct contribution, the well-advised sales trainer will be able to show that knowledge and skill attainment actually occur as a result of the training effort. Only to

the degree that such enhancement can be shown are we able to establish a distinct linkage between the training and any subsequent performance improvement."

Section V covers the selection and use of sales-training resources and consultants. This is, perhaps, the most readily useful chapter, as it includes extensive lists of organizations, directories, catalogs, distributors, packaged programs, and other services available to assist the sales trainer. Sample models, case studies, outlines, checklists, and practical tips and techniques help make the book a functional blueprint for sales training.

Written by members of ASTD's Sales and Marketing Professional Practice Area and other field experts, *The Sales Training Handbook* is a handy guidebook that addresses many aspects of sales training from a variety of professional perspectives. As a resource, it should add value to any sales-training library. Bob Craig, editor, has worked in the field of employee training and human resource development since the 1950s. Leslie Kelly, assistant editor, is president and owner of Kelly & Associates.

*The Sales Training Handbook: A Guide to Developing Sales Performance.* Englewood Cliffs, NJ: **Prentice Hall.** This book is available through ASTD Press. Order Code: CRST. $65 for ASTD national members, $70 for nonmembers.
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## An ISD Update

**Instructional Systems Development in Large Organizations,** by Wallace Hannum and Carol Hansen.

Instructional systems development (ISD) is a process for providing effective, efficient education and training programs. From needs assessment and performance analysis

through project management, implementation, and evaluation, ISD is as important today as it was 30 years ago, although the changing nature of organizations and workers have changed some of the applications of ISD.

When applied in a large organization, the process requires interaction and cooperation between multiple levels of management and personnel. Today's training professionals are perceived as change agents as much as training providers. Today's program designers must consider the goals and objectives of flatter organizations, a more culture- and gender-sensitive workforce, and technology that has transformed the essential nature of work.

*Instructional Systems* is directed toward large-organization managers who are responsible for designing, developing, or managing systems-based training and education programs for hundreds, even thousands, of employees, trainees, students, customers, and consumers.

Authors Wallace Hannum and Carol Hansen offer a general overview of ISD and an update on training and nontraining strategies and solutions to performance problems. They review the traditional five-phase ISD model and the prevailing literature in the field of instructional design.

The first third of the book outlines the fundamentals of ISD, including the accepted knowledge, research, and design methods. The focus veers away from linear or reductionist views of systems development toward the bigger picture—that is, a more flexible, expansive view that considers the workforce's changing needs. The authors walk us through the ISD process step by step, and review its applications. They summarize briefly at the end of each chapter.

The middle chapters are oriented toward instructional design, covering such issues as how to
■ consider the audience when
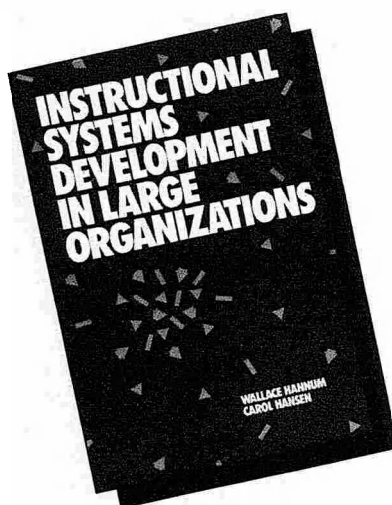
developing the program;
■ organize the instructional content;
■ select and use various instructional methods and media and the pros and cons of each;
■ manage the implementation of ISD projects;
■ introduce the planned change effort to the large organization;
■ evaluate the results and the role of evaluation.

Chapter 14, "Future Directions for ISD," is probably the "newest" in the entire book, in terms of offering recommendations or predictions for ISD models. The authors revisit the applications for ISD in light of today's climate and outline future directions for ISD models and ways to broaden and improve the base of ISD models, such as
■ develop ISD models that are more cognitive than behavioral;
■ give greater attention to implementation, emphasizing how-to, not just what to do;
■ separate systems delivery and management from development;
■ consider in the training design how anthropological, cultural, and ethnic factors may influence people's perceptions of their environments and how they process information;
■ distinguish between macro and micro models;

■ develop *models that are iterative* rather than linear;
■ incorporate procedural flowcharts within models;
■ streamline specific ISD procedures in the areas of analysis, design, development, implementation, and evaluation;
■ make better matches between instructors and learners;
■ conform less strictly to instructional objectives;
■ use cognitive task analysis, knowledge engineering models, and expert systems as job aids;
■ improve interactive media and computer-based delivery;
■ deliver training as needed at the work site;
■ develop more efficient models of testing and evaluation.

Three appendices in the final section show actual applications of ISD concepts and procedures in large-scale programs in the military, in a large government agency, and in a large computer company. The cases, written by people affiliated with those organizations, discuss the setup, implementation, and evaluation of each program, as well as such specifics as cross-functional training, continuing professional education, program redesign strategies, and survey questionnaires.

Though fairly cut and dry, *Instructional Systems* is a solid academic overview and a hint at what's ahead in the field of instructional design. For people who know the field, some of the research and methods may be dated (the authors cite extensively from the seventies). But because the material is presented in a familiar context and has both a process and an applications orientation, it may be useful as a sort of "blueprint" for setting up ISD programs or a course text.

Hannum is associate professor in the University of North Carolina's instructional design program in the School of Education. Hansen manages an instructional design and evaluation staff at the U.S. Depart-

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ment of State in Washington, D.C.

*Instructional Systems Development in Large Organizations.* 326 pp. Englewood Cliffs, NJ: **Educational Technology Publications.** This book is available through ASTD Press, Order Code: HAIS. $37 for ASTD national members, $39 for nonmembers.
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## Additional Reading

*Developing Technical Training: a Structured Approach for the Development of Classroom and Computer-Based Instructional Materials,* by Ruth Colvin Clark. 263 pp. Reading, MA: **Addison-Wesley.** This book is available through ASTD

Press, Order Code: CLST. $36 for ASTD national members, $38 for nonmembers.
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*Executive Development: a Strategy for Corporate Competitiveness*, by James F. Bolt. 209 pp. New York, NY: **Ballinger,** 800/638-3030, $24.95.
*Circle 184 on reader service card.*

*They Shoot Managers Don't They,* by Terry L. Paulson. 180 pp. Santa Monica, CA: **Lee Canter & Associates,** 800/262-4347, $10.95.
*Circle 185 on reader service card.*

*Large-Scale Organizational Change,* by Allan M. Mohrman Jr., Susan Albers Mohrman, Gerald E. Ledford Jr., Thomas G. Cummings, Edward

E. Lawler III, and associates. 314 pp. San Francisco, CA: **Jossey-Bass.** This book is available through ASTD Press, Order Code: MOLS. $28 for ASTD national members, $30 for nonmembers.
*Circle 186 on reader service card.*