QUANTUM LEAP

EMERGING IDEAS

A Vision Learning to Happen

A Dialogue with David Boulton

"The best thing he did for us had nothing to do with artistic matters - it was about learning, which he used to say is the only thing that the mind never exhausts, never fears and never regrets - learning - its the only thing that will never fail us."

Cesare da Sesto on Leonardo Da Vinci

In every age there are people who somehow transcend their contemporaries, people whose insights serve to change reality for the rest of us.

Copernicus, Newton, Darwin, and Einstein were such people. What set them apart and gave them the clarity and strength to so challenge the accepted *notions of reality, was that they learned to trust their own learning process*. Rather than being learning-bound to what was known, they learned to follow the necessities and insights which arose in their own learning. In short, with respect to their work these people were *learning oriented* rather than *knowledge oriented*.

David Boulton envisions a world populated with learning-oriented human beings. He passionately believes that there is nothing we can do for our children, ourselves, our organizations, or our species that is as relevant to solving our problems and facilitating our potential, as becoming learning-oriented. By learningoriented, he means *learning to 'sense' our own "live" learning process and orienting our living and working towards sustaining its engagement*. For Boulton, this includes everything from effective problem solving to how our sensing, feeling and thinking shapes our experience of the world and, in fact, shapes the world.

This may seem altruistic and philosophical and

"If this is indeed the case," Boulton proposes, "if we see that learning is where the practical meets the profound... if we see that what is most generally relevant to our lives and times are our capacities for learning (not just what we have learned), then what we require now is a Copernican-like inversion in the way we think about learning."

Inverting The Paradigm

"Whereas in the past we have viewed our capacities for learning as the 'means' through which we acquire the 'ends' of knowledge, skills and experiences, we must now see that extending our capacities for learning is the 'end' and knowledge, skill, expertise and experience are the 'means'."

When we arrive at the necessity for such an inversion, the real work can begin. Some things don't happen serendipitously — we wouldn't have landed on the moon if we hadn't intended to. "Once education and business see the necessity of developing our human



gents, our 'attention span' is unnecessarily dissipated, and soon we 'fall' or 'slip out' of learning."

"Our meaning needs arise from the deepest and most authentic activity of our learning process — when we learn to ignore them, no matter what else we may be learning 'about', we cut ourselves off from the fountainhead of our capacities for learning."

David Boulton, 1991

Mutually Learning-Oriented Relationships

"We wouldn't learn to swim in a desert or walk in outer space. We only learn to extend our capacities in environments that support and feedback to us — allow us to sense ourselves — on the very 'edge' of our experiencing. If we want to help people learn to extend their capacities for learning we must meet them on the 'edge' of their learning. To do this, we must first be able to respond to their meaning needs."

David Boulton, 1991

With these statements and the following three questions, Boulton challenges us to participate in a radically different way of looking at learning:

• "How can learners learn to extend their capacities for learning without first learning to trust their own 'meaning needs' as the primary compass from which to orient their participation?"

• "How can learners learn to trust their own 'meaning needs' without a learning environment which is responsive enough for them to experience those needs in the first place?" Boulton is the first to acknowledge that: "While I don't want to deny the profound implications, the most compelling reasons for what I am advocating aren't altruistic at all. They're driven by practical necessity:"

Where The Practical Meets The Profound

The business of business is education [and] the business of education is work.

Nan Stone, Harvard Business Review, March-April 1991

Precisely because it is no longer clear what knowledge and skills will be relevant to the rapidly changing needs of business and hence to the preparation of today's young people, what is clear is that *business will need better learners*.

Throughout the theoretical and applied organizational sciences, and from the Fortune 1000 meeting rooms to the business schools of every major university, the emerging paradigms center on improving organizational and individual learning. As organizations struggle to improve quality, responsiveness and efficiency amidst change and uncertainty, they are coming to realize the practical implications of W. Edwards Deming's insistence that the only sustainable advantage [of any organization] is learning.

Concurrent with the emergence of the learning movement in business, and driven by the enormous pressure to "reform", new approaches for facilitating learning are being tested in education: Collaborative Learning, Learning to Learn, Critical Thinking, Self-Esteem, Multiple Intelligences, Accelerated Learning and many more. These movements, together with various branches of cognitive science, developmental and humanistic psychology, are leading us toward a massive shift in the very mission of education:

"Empowered by a growing alliance with business and a host of new insights into how human beings learn, a new educational system is emerging. Of the many challenges it must face, I think its most significant one will be this: to learn to facilitate people who will be capable of learning in ways, and about things, that cannot be reliably predicted at the time of their education. Therefore, the most significant difference between today's education and tomorrow's will be the emphasis placed on each person's capacities for ongoing learning."

David Boulton, 1991

capacities for learning," says Boulton "we can begin learning what they are and how to facilitate their extension."

A New Sense Of Learning

Before we can extend our capacities for learning we must first make our experience of learning more vividly conscious. *We can't get better at something we aren't aware of.* But how does the fish recognize the water? For Boulton this is close to the heart of the matter:

"In learning to walk our 'sense' of beginning to 'fall' informs the movements that sustain our balance. Similarly, if we can develop a 'sense' for 'falling' out of learning — if we can learn to sense ourselves 'dropping out' or 'disengaging' — it can form the basis from which we sustain and extend our awareness of, and participation in, learning."

Boulton illustrates this by drawing on everyone's common experience of reading: "How many times have you been reading along, highly interested in something, and yet, despite that interest, suddenly found yourself 'waking up' to the fact that you have moved ahead many paragraphs or pages and cannot recall what you have just read? The drift that occurred could have been caused by any number of things that you couldn't really do anything about, but anything you could do, would begin with your becoming aware that you were beginning to drift. You can't do anything about something you're not even aware of. This same 'drifting' or 'falling out' occurs all the time in equally subtle ways when we are learning. So, if we are going to become conscious of, and able to participate in extending our capacities for learning, we will have to develop a sense for 'drifting' out of learning."

Now we arrive at the core of Boulton's work. Based on his research and personal experience, he believes that "falling out" results from having encounters with content (words, terms, phrases, concepts, ideas, sounds, languages, pictures, presentation styles, etc.,) that 'miss' or simply do not make meaningful connections. Such 'misses' cause spikes of uncertainty, curiosity or creativity ('meaning needs' he calls them). Because these environments (classrooms, textbooks, computers, etc.,) are unable to respond to the 'meaning needs' they provoke in us (at the 'same time, same place' level of our needs), they insidiously teach us to ignore them. When we ignore our own needs for more meaning, we become prone to following poor inferences and tan• "How can environments ever evolve that will be capable of responding to learners at the level of their 'meaning needs', unless the educator's goal in designing them is that they become the 'scopes' or 'two way mirrors' through which the educators themselves learn what those 'meaning needs' are?"

• "How well a person learns depends upon the responsiveness of the environment to their 'meaning needs' (to their 'immediate' needs for a deeper, broader grasp of, and participation in, what is going on.) And, how well the environment can respond depends upon how well it was designed to learn about and respond to those needs."

From Here to Implicity, David Boulton, 1989.

David Boulton calls environments that exhibit the web of interdependencies *Mutually Learning-Oriented Relationships*. He believes that any sustainable approach to reforming education or making businesses more efficient begins here.

A Vision Learning to Happen

"Why not cherish each child as if she or he were the key to the future of mankind, as if each had the capacity to become an Einstein, Curie or Michelangelo?" Boulton asks.

"And why not view each business organization as having the capability of making profoundly new contributions to human social and economic well being?"

What illuminates Boulton's work is this: like a fish that did discover the water it swims in, he arrived at the insight that learning itself is the central dynamic of the human being and that which can assure survival of the human community.

David Boulton has spent the past decade developing insights and technologies focused on radically extending the innate learning capacities of children and adults. All of his work has a central unified mission: assisting schools, businesses and individuals in creating the kind of highly responsive, mutually learning-oriented environments, in which learners may thrive.