Introduction, Reflections on Innovation

Good morning… I am so happy to share this wonderful celebration with you. When I accepted this assignment to provide some reflections on innovation, I didn’t quite realize what it would mean to relive through memory the most important period of my working life. It has been, after all more than a dozen years since I retired (and I was pretty old even back then!).

First off, I should acknowledge that the views expressed in the next few minutes are my views, based on my experiences, and do not necessarily reflect or fully encompass yours. Nor do they express the living experiences that enable EDC to thrive today - remember, this is my 20th century view - so Dave may want to contradict or modify many aspects of what I say.

And a not insignificant number of you in this room shared with me at least some of my 40 years here. And for that reason, too, I know you’ll have other views than mine, if you’re the same EDCers I knew! And so, there’ll be time at the end to hear your comments. In any case, I’m going to speak more about broad areas than about specific projects. I hope not to bore you too much with these generalities, because I believe they were, and continue to be, so important as conditions for true innovation in the work we do.

History

Let’s start with a little history as the foundation. I have always been very fond of a poster created back in 1984 by one of the long-lived and influential projects of that period, the Publishing Center for the Women's Educational Equity Act Program, led by Vivian Guilfoy and her great staff.

The poster proclaims: in each generation, action frees our dreams. And that is one of the keys to EDC’s successful record of innovative programs. At their best, they have always helped learners gain the skills and understanding to turn dreams into deeds. It is what our founders meant, too, when they stressed EDC’s commitment to applied learning, and the real-world problem solving they introduced into math and science education in the earliest years of this organization.

This is where we all need to acknowledge the genius of our founders. To remind ourselves: Back in the late 1950s, a group of world-class, albeit Cambridge-based academics, mainly from MIT and Harvard University, had a dream: to design a free-standing intermediary organization, not beholden to any one university or institution, that could join people from various roles - the universities and their researchers and scholars, practitioners in schools, artists, writers, business people - in the shared purpose of breaking out of the school text-book memorization mode by creating different and better learning materials.
It's probably worth remembering that the founders themselves worked out of an implicit but strong and comprehensive framework that should not go unacknowledged: the progressive tradition that asserts that each individual has his or her own genius waiting to be unlocked and fulfilled, and that education in the broadest sense of that word is the tool human beings use to learn continuously and so realize their best selves.

As we know, at that time, the focus was on mathematics, sciences, and rather soon, the social sciences. But much of that work was always conceived as requiring interdisciplinary backgrounds, many perspectives and points of view. It always valued not only utilizing the work of artists, storytellers, dramatists, musicians, but also applying the many new media emerging in the last half of the century.

First, laboratory-based science experimentation, then documentary film and photographs from the field, then computer experimentation and modelling - and on and on - into poetry and ethnographic story-telling. While this all seems rather tame in the world in which we live, at the time it was revolutionary in almost every sense of the word.

And I want to stress again: this work was viewed as a team effort requiring this diversity of expertise. Originally, in fact, we called these teams "working parties!" A rather socialist expression that was eventually dropped as we grew, broadened our funding bases, and by necessity became more politically and culturally astute.

Another foundational key to EDC's most innovative work and one to which I admit I'm addicted, is that of question-posing, that is, beginning by asking the right question.

**Re: Question Posing as a Key to Innovation**

One of the founding fathers, as many of you know, was Jerome Bruner, the Harvard cognitive psychologist who died last year at 101. As the principle leader in the development of the elementary social studies curriculum, Man: a Course of Study, he brought to EDC's early development his view that curriculum and other learning materials should be organized around great questions. The energizing, amazing question at the heart of MACOS is: "What makes human beings human?" How can you get a more provocative question than that?

But what does it mean to start with a question? It seems the most natural of steps to take. Yet in education of that time, in mid-20th century, we seldom found an acknowledgement of this crucial first step toward learning: seeking an answer.

It is, of course, a child's first response to the wonder of the world. What is that? Why? It is the underlying skill in all problem solving. We believed that first we must frame the problem by asking the right questions. What is happening? Why did it happen? What does it mean? We also believed that question posing is at the heart of scientific inquiry, at the soul of storytelling and poetry making, at the core of leadership of institutions. That it is the quintessential expression of human intellect and curiosity - to wonder, to seek to know.
The best of EDC’s work over those early decades challenged people, young and old, to raise and find answers to questions of importance in their lives. Whether it was parents wondering how best to discipline a child, a child wondering how a battery works, a doctor wondering how to ease the transition for families of terminally ill patients, a teenager asking why mathematics matters in life and career, a mother wondering whether to breastfeed - the challenges of the human condition demanded, and of course still do, the willingness to confront the question and to seek to know. In that sense, questions are our passport to the future.

The best of EDC’s work in that old 20th century raised and sought answers to questions of importance in our lives.

**Learning, Leadership and Innovation**

Now I want to say a few things about Learning, Leadership and Innovation, and also be a bit more personal. Those of you who already know me, know how often I have said that for me, very simply, learning is the liberating force in human development. That belief has underpinned all that I have thought and done in my own leadership roles. In addition, all my years at EDC confirmed three truths that still abide for me, and have always guided me in my work.

I view these as integral to the way one, consciously and unconsciously, approaches innovation and again, they reflect much of what we learned from our founders:

First, Learning is the most essential human behavior. That was a key tenet of Jerome Bruner.

Second, Community and Diversity are complements, each enriching the other. (Today, sadly, so many view these two aspects of our lives together as competing, not complementing each other).

Third, Life is not simple and linear; it is complex and contextual.

These three truths have deep and far-reaching implications for all of us in this room, each in his or her own way a leader in building and sustaining this organization. To frame them this way means, first, that everyone is a learner as well as a leader. We are all learners because the future hasn't been invented yet. In the 21st century, certainly, it has become almost a truism that there can be no separation of work and learning, for any of us.

Second, we all must learn from the heterogeneous backgrounds, cultures, experiences, knowledge and beliefs that exist in the communities we join in this country and around the world. Navigating and appreciating diversity mean that the boundaries of our own cultures and the definitions of our communities are permeable and mutable.

Third, and a corollary, is that nothing is discrete. All is dynamic and interconnected and requires an understanding of the relational and contextual nature of learning. We must embrace an ecology of human development, recognizing that individual growth and learning are interdependent parts of a larger system that extends from the family to the school to the community and its institutions and ultimately to the world.
In 1993, in my annual report letter, I closed with a provocation from the then new science of quantum physics, which was having a good deal of influence on the way leaders from other fields were beginning to address change, and what it took to bring it about. It centered on what we might call "the quantum world." The bottom line was that everything and everyone is interconnected.

Instead of a linear world of discrete and predictable elements, the quantum world presented us with a world of dynamic, living qualities, all in patterns of active relationship, responding to each other and to the environment. In her fascinating book of that time, "Leadership and the new Science," Margaret Wheatley summarized as follows (and I quote): "In the quantum world, relationships are not just interesting; to many physicists, they are all there is to reality .... This world of relationships is rich and complex .... The quantum world has demolished the concept of the unconnected individual. More and more relationships are in store for us, out there in the vast web of universal connections."

Well, that last sentence certainly summarizes our world today!

**Communities of Practice**

So, what does it mean to be a leader in an organization if you accept these views. I relied heavily on the concept of communities of practice. Why is it important to build such communities? First, no one of us can do our work alone. The world, as I’ve said, is complex, there are constantly emerging bodies of knowledge and skill, continual waves of information and new technologies washing over us. We needed back in the 20th century, and we need now, all an organization’s talents—its people—to share and be focused on its goals and ways to apply them in the real world.

I believed that an R and D organization like EDC could best excel at innovation by being structured around communities of practice, which were, in a way, an outgrowth or evolution from the "working party" structure I described from our earliest years.

But in today’s world, a community of practice has certainly changed from the world of the 20th century. Now our technologies enable us to bridge so many geographic divides so easily. Our working groups may be, and often are, widely dispersed. But the principle of a community—of working together—is still the key.

Because no one of us can even now do our best work alone.

Fifteen years ago, as EDC completed its 45th year, I realized that for all but eight of those first 45, EDC had been my working home base. The length of my journey from research assistant (that’s where I started out!) through so many roles in research, development and administration astonished even me!

What held me here for so long? Some answers come to mind: the privilege of engaging in work worth doing, to contribute to so many aspects of improving learning opportunities and health all over the world; and the passionate, dedicated and able people who make up EDC. Few
organizations provide such a rich and varied learning environment and such a superbly skilled and humane staff.

I believe that nothing is more important in and to this organization than the individuals who make up its whole. In a talk back then, I quoted a very gifted staff member who is still here, Rebecca Jackson Stoeckle, who at that time was working at the intersection of ethics and medical practice. She said:

“I work with a team of really sharp people, and I always feel like I’m learning from my colleagues. Over the course of their careers, they have managed to keep alive a passion about what they do. We give each other that energy.”

I could quote many others from that period as well, but this is a celebration, not a talk-a-thon, so let me suggest a way to summarize. As EDC continued to evolve, there was a continuity expressed as a view of human nature: that it is resilient, adaptable, curious and determined; and a belief that our species is bound together by our humanity. We were working to build an organization that supported THAT view of human nature, and that was structured to embrace the values and vision of the people within it.

For me, EDC has been almost an organic entity with a heartbeat, a voice. It has been and continues to be a place of possibilities, a place where the seeds of innovative work can be planted and flourish. In that sense, innovation has meant that each project has been designed to set new horizons in the application of knowledge for the benefit of people.

Further thoughts on Innovation
EDC celebrated its 30th year in 1988. That December, guess what --we concluded the year with a daylong symposium reflecting on our work and looking ahead to the future. In preparing for that occasion, I asked some of the funders and clients who worked with us over the years to share their views of the organization and its people. To a person, their responses expressed an understanding of EDC’s ethic, style, and commitment, and an appreciation of staff members and their values. And one of them made a remark that definitely shares a place in any reflections on innovation: (and I quote)

“What EDC did that was brilliant and memorable was to encourage risk taking... focusing energy and resources on something worth dreaming about.”

If people whose lives you have touched say that about you, you've done something right.

Ending
Ruminating on the remark from that person in the field, and letting my mind wander through those past decades and the incredible people who were my teachers and mentors, my friends and colleagues, I realized that in almost everything I had decided to say today, there was a shared quality. And I wanted to name it in closing, because it is so important to the world as well as to innovation in particular, and it is the quality that at its best EDC's culture nurtures.
It is courage in its most embracing meaning. EDC people learn to be open and strong in the face of new questions, new knowledge, and new challenges that must be accepted, and integrated into one's life.

This courage is the steadying force that as I’ve mentioned strengthened by so many experiences here from stimulating and essential work to supportive and inspiring co-workers.

We probably each draw from EDC in proportion to what we need. I know I did. This embracing EDC speaks to our spirit and our intellects with an implicit message that I’ve already described: you are here because you are a learner and a leader, a person to influence the world. We expect great things from each of you. Limitations will be those you impose, opportunities for leadership and service will be those you choose.

Over the decades, I have never doubted that we were helped to find this courage by this community, where we found the support to be our best and most courageous selves - at least much of the time! Ultimately, our journey as educators is a moral journey, energized by purpose and ideals.

I felt better once I had put into words what is so obvious and enduring from the legacies of EDC’s founders and early programs and all the generations of people and programs between then and now.

Years ago, I discovered a poem by the Spanish poet Antonio Machado that concludes - Traveler, there is no path. The path is made by walking.

I have repeated these words in talks all over the world as a way to express what has been true in my life for they express so succinctly my belief that the courage the world requires of us is often that we walk into the unknown. The support of this unique and wonderful organization and its culture helped give me that courage as I trust it does for all of you.

I leave you then with the wish that EDC, and your time here, will indeed provide you with as much personal and professional fulfillment as mine did. May this institution, and its values and practices, free each of you to be your most courageous selves as you learn together and act as leaders in many different settings across this one world…