Reflections on IT Leadership: The Legacy of Diane Balestri

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Diane Balestri was an extraordinary individual who touched the lives of so many of us in the profession with her unique gift for leadership. She was widely regarded as the most articulate advocate of user-centric technology, from her earliest days as the leader of the FIPSE Technology Study Group to her final days as Vice President at Vassar. Her death last March cut short a career that would have taken her next to Brown University as Vice President/CIO and it deprived all of us of the wisdom and camaraderie of a valued colleague.

We seek to honor Diane today not by revisiting her career nor by recounting the personal experiences we shared with her, as wonderful as they were. Rather, in keeping with what we believe would have been Diane's own preference, we want to highlight some of her insights about technology, collaboration, leadership, and the nature of our profession. Through citations, spanning more than twenty years of Diane's writings, we hope to identify key themes in the evolution of her thought. And through extrapolations of her most recent work, we hope to distill some pointers that may guide us towards the future. We believe that this approach, reflecting on how to help one another do our jobs better, is the best way to honor Diane and to preserve her legacy.

With that in mind, I would like to introduce Susan Perry, who will talk with us about Diane's views of the profession, beginning with her preparation of the legendary report: Ivory Towers, Silicon Basements. Few publications in our field have had as great an impact or have been more aptly described as seminal. The wisdom of that work, the very first volume of the EDUCOM Monograph Series, helped shape the landscape of technology in higher education as we know it today.
Susan is Senior Advisor to the Andrew W. Mellon Foundation and Director of Programs for the Council on Library and Information Resources. Previously, she was Chief Information Officer at Mount Holyoke College. She met Diane in 1987 when they both inherited language lab responsibilities, Diane at Princeton and Susan at Stanford. Susan worked closely with her on a number of mutual projects. They also served together on the EDUCAUSE Board and the SAC Board. Susan.....
**Susan's Presentation:** Diane Balestri was one of our profession’s most thoughtful leaders and one of our most articulate speakers and writers. To my mind, her major contributions were in the areas of teaching and learning, thinking about the profession and the needs of staff as the profession developed, and thinking about collaboration both within an individual institution and across institutions. I hope in this presentation drawn from her writings, to let her own words speak for her.

I would like to begin by saying that I think Diane had a deep understanding of what it means to collaborate and that she demonstrated collaboration from her very earliest writings to some of her later writing. Her early work was as the integrator and in fact, the scribe for a group of people who were thinking primarily about teaching and learning in higher education and who were looking ahead to the impact of technology on the way faculty teach and students learn.

I would like to share with you some of her early writings on teaching and learning.

Then I would like to share with you some of her thinking about the development of the profession.

Finally, I would like to return to some of her later writing on collaboration.

**On early efforts to incorporate technology into the teaching/learning process...**

From the book *Ivory Towers, Silicon Basements: Learner-Centered Computing in Postsecondary Education* The FIPSE Technology Study Group, chaired by Diane Balestri 1988

Computers are now a permanent fixture in American institutions of postsecondary education. Every ivory tower has its silicon basement. But those basements are astonishingly expensive. Their creation and maintenance have transformed capital and operating budgets and have affected staff and space allocations on almost every campus. Many faculty and administrators dwelling up in the ivory towers are starting to shake their heads skeptically at all the commotion below. “High tech means high cost, but what’s the net”?

A technology is a human product that enables further human creativity and productivity. The computer, like the great enabling technologies before it - paper and electricity-for example, has no single predetermined end or use.
Every segment of the academic community has a stake in the development of computing resources. For instance:

Computers are becoming important tools in the worlds of work and life; as a consequence, both students and their future employers are demanding that colleges provide training in computers, though they cannot always identify the training needed.

Computers are rapidly changing the research agendas in many fields and thus the funding priorities for research.

Department heads and administrative staff are finding computers increasingly useful in the operation of their offices and departments.

Developers and vendors of hardware and software have been offering enticing discounts to the educational market.

A decade from now many campuses will look back at the middle eighties and reflect that, at that time, hardly any machines were in place. The internal and external pressures outlined above will have caused computers to affect virtually every department and every facet of an institution’s operation. And the costs will have been substantial.

If an institution wishes to place better learning outcomes for its students among the benefits to be gained from the investment of the whole community in computing, it will need to understand what benefits to learning are made possible by computing, and how those benefits can be achieved:

Is there a compelling vision of education enabled or supported by computing, one that is worth the risks and costs that institutions will have to accept in order to pursue it? If so, what are the implications of that vision for:

- Teaching
- Faculty careers
- The achievement of equity in education and in society
- The assessment of learning and the evaluation of academic programs
- The modes by which needed software is produced and distributed.

We believe that computing can improve the quality of postsecondary education. We have come to this conclusion from years of experience as practitioners in many different institutions and disciplines with many different backgrounds, responsibilities, dreams and even disappointments. We base our belief in part on
the experiences and reports of our students, and also on the interest that colleagues in our disciplines have shown in our work.

Our sense of common purpose is governed by three general criteria:

- Learner-centeredness
- Cost effectiveness
- Far reaching impact.

We believe that the most valuable applications of computing are humanizing and intellectually liberating for each learner.

The book contains chapters on learner-centered computing, new roles for faculty, sharing the advantage (The dilemmas of the disadvantaged: isolation and passivity, evaluation, and delivering the goods, barriers to the expansion of learner centered computing.)

At the conclusion, Diane states for the book collaborators:

All of us, in one way or another, think that computing will play a critical role in shaping the future of higher education. Some of us predict that technology will help revive traditional concerns for teaching and learning and infuse them with new and much-needed energy within the established structure of higher education. Others of us think that as the new information and telecommunication technologies become pervasive, they will-and should-subvert traditional academic structures and eventually change the course of higher education.

In 1989 in Educom Review, in an article entitled Educational Uses of Information Technology, writing for the EUIT Committee, she says:

The value of information technologies for higher education in the 1990’s will be determined in large measure by the ways in which we use those technologies for teaching and learning. That use can and should occur across the whole spectrum of disciplines and institutions-not just in science and engineering, not just in research universities, but in humanities and social science classrooms as well, in rural and urban institutions, and in the community colleges that are the gateways to learning for the largest percentage of postsecondary students in this country.

Today, we have real evidence-still somewhat sporadic and anecdotal, but increasingly convincing in its conclusions that the thoughtful use of information technology is enriching the learning experience of many students in the writing classrooms of Brookdale NJ Community College, for instance, in the chemistry
laboratories of the University of Illinois, and in the philosophy courses at Carnegie Mellon University. Local and national computer networks are extending the concept of the classroom and the class hour to meet the needs of off-campus learners; meanwhile the same networks are linking campus-bound students to data and to other students and faculty members around the world. Through experiments such as these, we can glimpse an era in which faculty will use information technology to support broadly accessible and deeply engaged learning in many practical ways.

I believe that in 2002, we are now realizing some of the impacts on teaching and learning predicted by these early pioneers.

In this article, she also advocates creating community and describes Educom’s Software Initiative and EUIT as places which created a productive and supportive community among its own participants and across the spectrum of higher education and the information technology industries.

She goes on to say that building the community is most important. And promises for EUIT a strong foundation “remembering how much we have already accomplished by paying attention to our members and to our processes, to our traditions of listening to one another and of collaborating in unexpected partnerships. We must nurture strong support structures across and within institutions for the members of the academic computing community; we must explore and help to define new paths for their personal and professional growth. And we should see to it that the teaching and learning carried on in the technological environments we have built will also be infused with the values we espouse: intellectual and personal integrity, respect for one another as colleagues in a common enterprise, and a fundamental commitment to knowledge as a resource to be shared by all.”

**On the profession...**

In a paper presented at Cause95 with Ruth Sabean, entitled *Developing as Information Technology Professionals: Profiles and Practices*, Diane frames the issue of professional development in this way:

In the last decade, technologies supporting all aspects of higher education have proliferated, the number of technology users on campus has vastly increased, and their expectations have soared. Campus computing organizations have scrambled to keep up, in a rapidly evolving, centrifugal process that has spun our organizations and our staff further and further afield—physically, technologically and psychologically—as we attempt to balance service and innovation, to support the newest technology without abandoning the oldest,
and to add or develop the needed expertise among our staff. This outward, centrifugal motion has created collisions with other organizations on campus that also acquire and deliver information—the libraries, the AV departments, the television stations, to name a few. These collisions have sometimes been painful and confusing, sometimes liberating and creative.

For us as IT managers, this centrifugal motion within our own organizations, as well as the resulting collisions with other groups, creates many challenges. In this paper we focus on the particular challenge of enhancing the development of our professional staff members in this fluid and rapidly changing context.

We begin with the observation that professional staff are too often narrowly defined by their particular expertise, or even more narrowly by the specific technologies with which they work: we can easily identify the UNIX gurus for instance, and its not hard to tell the AV technicians (the Old Media experts) from the New Media Center staff, or the reference desk librarians from the computing center Help Desk professionals. They each have a unique vocabulary, a unique vantage point within the institution, and sometimes unique dress and work habits.

The specialized expertise of these diverse professionals seems necessary to provide first-rate customer service. But a narrow emphasis on specialized expertise as the primary characteristic of the IT professional can hobble the IT organization, making it difficult both for individuals to grow professionally and for the organization to respond quickly and with a clear sense of its mission as technologies evolve and customer needs increase and change. Furthermore, this emphasis on specialized expertise has led to subtle, technology-based class distinctions among IT professionals, with the result that as technologies merge, productive synergy between groups can be unnecessarily hard to generate. Where groups in collision have been asked to cooperate or even merge, these distinctions have made collaboration difficult.

She goes on to say that the profile of the IT professional should include these four primary characteristics: Customer-orientation, Creativity, Collaboration and Communication. She implies that the role of the leader of an IT organization is to model these characteristics and to help staff to achieve them.

These characteristics certainly describe Diane herself and make it easy to understand why she was so respected by not only by her colleagues, but also by presidents, provosts, and faculty.

**On collaboration:**
While collaboration is a sub-theme in her work on teaching and learning and our developing profession, Diane specifically addressed collaboration in a September/October 2000 Educause Review article entitled Collaborations Great and Small. She states:

Collaboration becomes especially seductive to contemplate whenever costs are high and expertise is scarce.

But the barriers to successful collaborations, are formidable and the benefits are not always realized. The most significant barrier is the failure to abandon the stance of competitors and to espouse a common goal. Other barriers are organizational, ranging from cultural chasms and hierarchies that separate the partners to unequal distribution of effort and the fear of loss of identity. Collaboration outcomes can be unsatisfactory, if reduced, as they often must be, to suit the lowest common denominator, and the logistics of sharing at a distance can frustrate the whole enterprise. Nevertheless, in the highly connected, resource-rich interactive, and unfortunately, expensive environment now being created with information technologies, isolation is simply not an option.

Successful collaborations must begin at home. Getting staff to work on projects or services across departments within a school develops basic habits that prepare both the staff and the institution for the more difficult and elaborate activities involved in partnerships and consortial institutions. Intrinstituional collaborations are not especially hard to develop, but they require leadership, patience and encouragement from the highest levels. They demonstrate the value of sharing and build that value into the fabric of the institution.

Those of us who work at small colleges are going to find ourselves increasingly engaged in, and even building, much more comprehensive regional and national consortia, for the fundamental strategic purpose of comprehending, managing and affording the next generation of IT infrastructure and services. These new or reconceptualized consortia will undoubtedly contribute to our survival as institutions capable of continuing in our common mission of educating leaders and strong citizens for the twenty-first century. We will enter into such consortia for pragmatic reasons: for sharing, and thus helping to control, the costs related to the next generation of basic technical services that will be needed by all small colleges, but that will probably not be affordable for most.

The rapidly increasing interconnectedness of the IT infrastructure will make these collaborations just as critical for those of us who remain committed to residential teaching and learning as for those who find and serve their students at a distance.
She ends by stating: On the excellence of all will the excellence of each be built.

I hope that this selection of Diane’s writings tell the story of a person who was people centered, who understood the centrality of students and of faculty and who understood the support role that information technologists and librarians should provide to higher education. Diane understood the culture of higher education, saw early on the role technology was likely to play in teaching and learning, research and higher education administration. Her work shows us someone who thought carefully about how information technology managers could best work with staff to build a new service profession and who believed strongly that the way to move the information and technology services of our campuses forward was through collaboration and appreciation of the various roles and skill sets individuals and groups of service providers bring to the enterprise both within and among our campuses.

I will now turn this over to Marty, who will talk about Diane’s later work. Marty is Chief Technology Officer at Reed College and President of the NorthWest Academic Computing Consortium. Marty’s friendship with Diane began nearly twenty years ago and, like me, he served with Diane on the EDUCAUSE Board, the SAC Board, and other groups. He and Diane worked on many projects together; most recently they collaborated on a Mellon-sponsored initiative to investigate technology innovation and sustainability. Marty....
Marty's Presentation:  Thank you Susan.

Working with Diane was always a pleasure because of her wit, her enthusiasm, her generosity, and her warm sense of humor. Though she was a giant in the field, she never lost her sense of humility. On numerous occasions she opened conversations by saying "What can you tell me about this? No doubt you know more about it than I do." Most of the time this wasn't true. Yet Diane always made you feel that you had something valuable to contribute and she listened attentively to whatever you had to say.

Despite her unique ability to elicit insights from everyone and to fashion fragmentary ideas into dazzling strategies, Diane often joked that sooner or later someone would discover that she was really just a humanist, masquerading as a technologist. In fact, of course, Diane was the model of the twenty-first century technologist: she had an intuitive grasp of the "big picture" of technology in higher education and was second to none in her ability to articulate the relationship among infrastructure, IT support, and institutional goals.

Those of us who had the opportunity to work with Diane witnessed first-hand her extraordinary talent for listening, collaborating, communicating, and generating creative approaches to problems. As Proust once said: The voyage of discovery is not in seeking new landscapes but in having new eyes. Diane brought new eyes and fresh insights to virtually every aspect of technology she explored.

Susan has cited a number of passages from Diane's early thoughts that helped chart the course for technology in higher education in the nineteen-eighties and nineteen-nineties. I would like to focus on some ways in which her thinking evolved during the last few years with respect to four particular themes.

- positioning technology as an agent of institutional excellence
- having the courage to resist conventional wisdom
- addressing the rising tide of users' expectations
- tying resource issues to assessment

In an article entitled Stability and Transformation, Information Technology in Liberal Arts Colleges, written for a special issue of Daedalus in 1999, Diane discusses the technology-related anxieties that have repeatedly surfaced in higher education. She says:

[T]he deepest threat that technology appears to pose is erosion of the intensely interpersonal and reflective nature of liberal learning itself and
In articulating this problem, Diane zeroes in on the pivotal concern of university decision-makers since the beginning of academic computing, nearly forty years ago. Though there are few today who deny that technology is an integral and permanent part of university life, there are nonetheless many who continue to worry about the impact that technological transformations are having on our institutions. We who are in the IT profession sometimes minimize such concerns or dismiss the worriers as Luddites.

However, as Diane points out, ignoring these individuals -- and their concerns -- is a serious mistake. There is much to be learned by understanding the teaching and research methods that have brought us this far and much to be gained by engaging those with concerns about technology in a dialogue about transformation. As Diane goes on to say:

“The challenge is two-fold. The first challenge is to determine how information technologies will be positioned by strategic planning as agents of institutional excellence, on the one hand undergirding and stabilizing the institution’s core and on the other hand enabling necessary and appropriate transformation.

The second challenge is to turn that strategic vision into an operating plan for information technology that effectively balances the maintenance of a ... stable working environment with projects that ... enable change by adopting, adapting, rejecting, even inventing information technologies as they suit the mission of the institution.

In many ways, these points lie at the very heart of Diane's vision for technology and help to explain her enormous success in communicating this vision to presidents, provosts, faculty, and others who have questioned the consequences of embracing new technologies.

Consider her first challenge, determining how technologies will be positioned as agents of institutional excellence. This challenge is a direct statement of one of the themes in Diane's recent thinking. When we evaluate a new technology, when we discuss it with senior officers, board members, and others, to what extent do we focus on the contribution it will make to institutional excellence? How often do we look at the institution's mission and goals as defined by those individuals and how well do we illuminate the ways in which technology will serve their goals?
Overlooking the role that technology can play to preserve and enhance the traditional missions of our institutions is, at the very least, a missed opportunity. As Diane suggests, our first task is to understand and articulate the ways in which new technologies can help to stabilize some institutional objectives while fostering the transformation of others.

Making such discriminations requires us to look beyond technological goals in order to see our institutions through the eyes of faculty members, provosts, presidents, students, parents, and others. It means questioning the assumption that all technology transitions are inevitable and it means taking the time to identify explicitly the ways in which particular innovations will be beneficial (or threatening) to institutional stakeholders. Diane's lesson for this theme may be summarized thus: **Technology is at its best when it helps to enhance the core mission by sustaining as well as by transforming the institution.**

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The second challenge -- balancing a stable working environment with necessary technological change -- is no less formidable than the first. This challenge relates to another theme in Diane's thinking: having the courage to resist conventional wisdom. As purveyors of information technology, we are forever disrupting the status quo. Each new generation of hardware and software we introduce may have far-reaching and unpredictable consequences for the academy, from pedagogical methods to job descriptions. It is our responsibility to find ways to coordinate necessary technology transformation with operational stability in order to preserve the overall health of the institution.

Beyond doubt, this ability requires technical sophistication and a broad understanding of institutional objectives. But true technology leadership requires more than that. It requires the courage to resist popular positions and, on occasion, to depart from the path of accepted wisdom.

Years ago, a common axiom in the industry was that **no one ever got fired for buying IBM.** While the name of the vendor may be different today (:-) the axiom still holds true. However, the safest strategy is not always the optimal one. Determining the path that is best suited to the mission and specific needs of one's institution, regardless of the popularity or unpopularity of that path -- and in the face of external and internal pressures -- requires courage as well as insight. Diane exhibited both of these traits in abundance. Every college, university, committee, board, or task force with which Diane was associated benefited enormously from her capacity to see beyond the familiar path, her willingness to define her own directions, and her ability to inspire her colleagues to follow. Her lesson for us on this theme is this: **We must strive to discern when it is in**
our institution's best interest to adopt new technologies and when we should reject them; when we should attempt to modify existing technologies and when we should seek entirely new ones. In all cases, the exercise of IT leadership must transcend the pressures of conventionality.

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In the last few years, Diane became excited by the prospect that pivotal milestones for educational technology were being reached. As she said in her *Daedalus* articles in 1999:

In the past decade... significant numbers of faculty members in all disciplines and at every sort of institution... have been using whatever information technologies are available... to supplement, to develop, and... to improve their teaching and their students' learning. Suddenly, the [demands].. that faculty members are [making]. of technology, and their desire to implement advanced and multiple technologies in courses, are... outstripping the solutions that available technologies can provide.

While this level of faculty engagement is in some ways the crowning achievement of two decades of infrastructure building and IT proselytizing, Diane correctly perceived it as the arena in which the next major successes -- or failures -- in higher education technology will be played out. The fact that so many faculty and administrative leaders have accepted the transformative potential of information technology, led Diane to a third theme: addressing the rising tide of users' expectations.

As Diane points out keeping up with these expectations may exceed our abilities. Faculty members' fertile imaginations often prompt them to envision technologies that are years, perhaps decades, away. Rather than recoiling from this situation or framing it as the familiar problem of managing users' expectations, Diane saw it instead as an opportunity to capitalize on highly-motivated faculty, to encourage them to investigate new products, and to collaborate with them to define and develop innovative technologies. Diane was remarkably adept at exploiting the imagination and zeal of faculty members to create new avenues of technological exploration. The lesson we may take from Diane is this: Users' demands that seem to be unreasonable are often the key to technological innovation. Instead of resisting such expectations, we should find ways to leverage them.

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Late in 1999, at the very height of the longest economic expansion in US history, Diane raised concerns about the future of IT funding. Her insight in this regard
was nothing short of prophetic. While it was true that the nineteen-nineties brought unprecedented funding for technology, competition with the private sector for good technical staff and the demand for rapid equipment replacement also rose to new levels. When the economy began to falter in the spring of 2000, Diane wondered if the relief that IT was beginning to feel might be short-lived, and if it might, before long, be replaced by budget cutting. As we know now, her concerns were right on target.

In thinking about the problem of IT funding in 1999, Diane suggested a parallel between technology resources and physical facilities when she said that:

...strategic planners need to conceptualize the entire information infrastructure as an essential physical asset that ...requires its own guaranteed funding, or endowment.

Diane felt that to escape the boom-bust cycle of traditional technology funding, institutional leaders need to be convinced that effective pedagogy depends on reliable technology which, in turn, depends on stable financial support. This is the fourth theme in Diane's thinking: tying resource issues to assessment. Linking technology infrastructure directly to a college or university's core teaching mission provides the foundation for developing a guaranteed, long-term funding strategy for IT.

To effect this linkage, IT leaders need to collaborate with others to collect good data about costs and benefits. As Diane suggests:

When new, large, and continuing expenses are involved, as is the case with information technologies, having the expertise of an institutional researcher to plan and execute good quantitative and qualitative studies is invaluable.

She also points out, though, that benchmarks may not be uniform across -- or even within -- institutions.

The characteristics defining "excellence" in [technology] use and outcome will vary from college to college and should be specified clearly as the focus of study. Excellence can be assessed in several different ways.

When it comes to assessing the success of technology specifically for teaching, it is a common mistake to use scores on common tests for comparing old teaching practices with new, and then to judge the merit of the new against the standards of the old. Instead, we must begin our assessment of technology and teaching with the observation ..., that thoughtful incorporation of technology in the learning process has
actually changed both what is learned and how it is learned. ... Assessment should focus on ascertaining the benefits to students in both these areas.

Diane's lesson here is this: **Coupling careful tracking of IT investments with compelling assessments of IT benefits is vital to convincing university decision-makers that stable funding for technology is essential to achieving and maintaining institutional excellence.**

In regard to this point, Diane praised the efforts of Dave Smallen and Karen Leach in promoting the annual COSTS Survey. Likewise, I suspect that she would have been delighted to see the soon-to-be-released EDUCAUSE Core Data Survey which seeks to help IT officers do a better job of benchmarking IT costs and benefits for their institutions.

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Selecting only a handful of themes out of so many that can be found in Diane's presentations and papers, wasn't an easy task. I hope that the ones we've chosen will be valuable to you.

With Diane's passing some of us have lost a good friend and some have lost a great co-worker; but all of us in the profession have lost a valued colleague and gifted leader. **The greatest tribute we can give to Diane is to accept the challenges she has identified, take advantage of the wisdom she has shared with us, and carry on the business of inventing the future with her leadership as our guide. I can't think of anything that would make Diane more proud than knowing that her good work will continue to benefit students, scholars, and her colleagues for many years to come.**