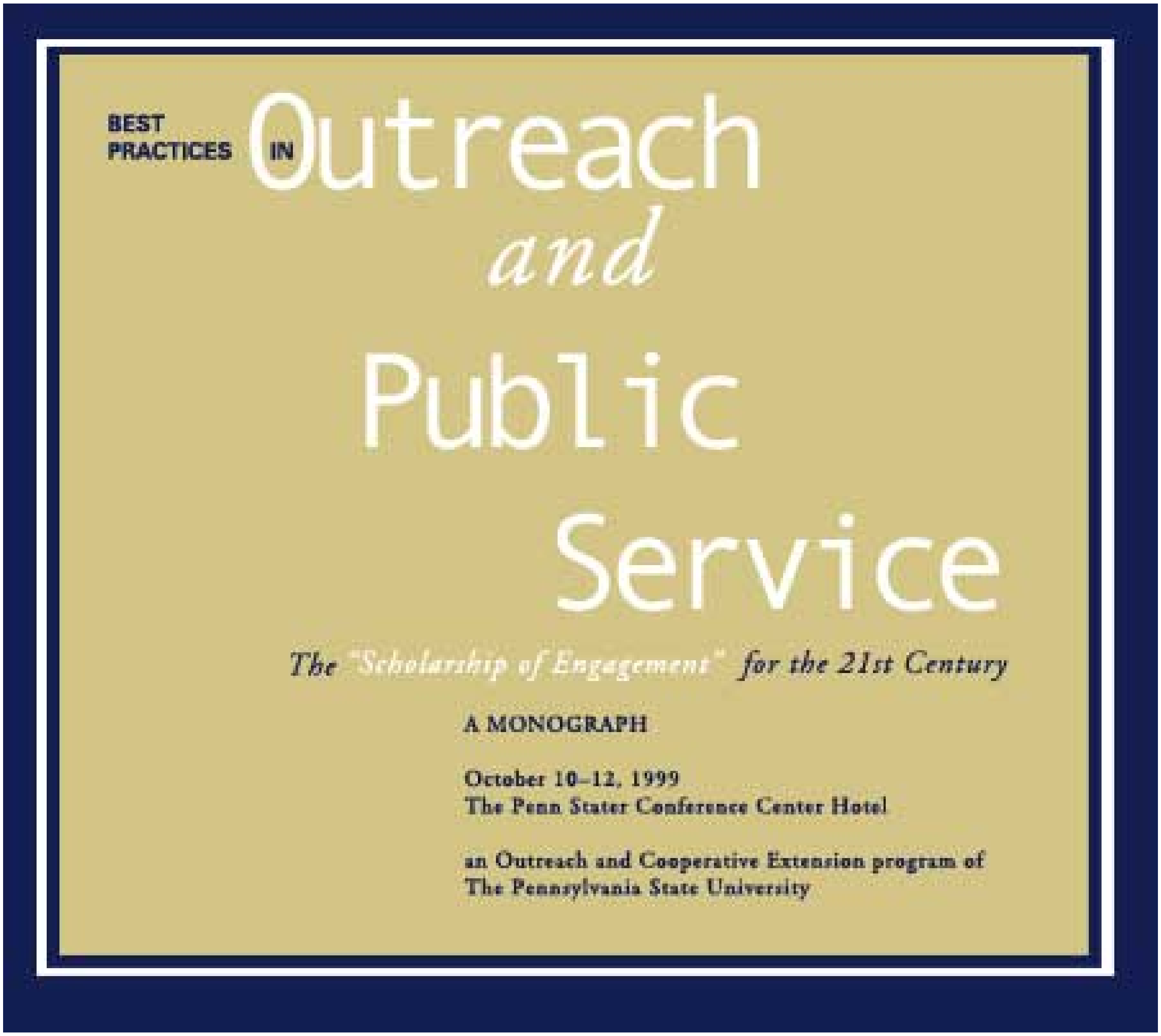

BEST PRACTICES IN
Outreach
and
Public
Service
The "Scholarship of Engagement" for the 21st Century
A MONOGRAPH
October 10–12, 1999
The Penn Stater Conference Center Hotel
an Outreach and Cooperative Extension program of
The Pennsylvania State University

PENN STATE Outreach MAKING LIFE BETTER®

Table of Contents

PENNSTATE

U.Ed.OCE 00-1073/jlm/GSM

Introduction

Colleagues,

I am pleased to share with you the monograph from the *Best Practices in Outreach and Public Service Conference* held October 10–12, 1999, at The Pennsylvania State University.

This monograph represents key issues, challenges, successes, and opportunities discussed among the 329 participants representing seventy-one institutions from forty-eight states and six countries who gathered to share and learn. This group, comprised of presidents, provosts, faculty, and outreach leaders, exchanged ways to move the outreach agenda forward.

As noted in the report *Returning to Our Roots: The Engaged Institution*, “it is time to go beyond outreach and service to what the Kellogg Commission now defines as ‘engagement.’ By engagement, we refer to redesigned teaching, research, and extension and service functions that are more sympathetically and productively involved with communities .... ”

It is critical for public universities to become even more engaged. Furthermore, our institutions must be focused on enhancing existing models and creating new models for sharing scholarship in ways that have a greater impact on society. This conference provided a forum for sharing approaches and experiences that can lead to a new level of understanding and promise.

We hope this monograph will contribute to the ongoing dialogue around these critical topics.

Sincerely,

James H. Ryan
Vice President for Outreach and Cooperative Extension
Penn State University

“The Engaged University”

By Graham Spanier
President
Penn State University

Let me begin with a word of welcome to Penn State and say how pleased we are to be hosting this conference on outreach and public service. It is very exciting to see so many people gathered with a common interest in the theme of engagement. The idea of partnering more closely than ever before with the communities our colleges and universities share offers many important opportunities for the future of higher education. The possibilities are as varied as our institutions. They hold in common the chance to make a tangible contribution to enhancing the quality of life through learning.

Graham Spanier

I am pleased to share with you this afternoon the vision of engagement that has come out of the work of the Kellogg Commission on the Future of State and Land-Grant Universities, for which I am privileged to serve as chair.

The Kellogg Commission

Serving on committees is about as central to life in higher education as football Saturdays and editorials in the student newspaper. Most of us have put in more than our share of hours on various committees and commissions and read plenty of reports produced by those groups.

Quite a number of those reports have found prominent places on our bookshelves, where they have been consistently shown to produce some of the most academic dust in America.

It would therefore be quite understandable if one were to be a tad skeptical about yet another higher education panel issuing yet another series of reports about yet another crisis facing America’s universities.

But the work of the Kellogg Commission is distinctly different from any that I’ve seen in my years in higher education administration — for a number of very important reasons.

One is the source: The W.K. Kellogg Foundation, which has made a major commitment to fund this work and to facilitate real and lasting change on our campuses.

Another is the people. The Commission is made up of twenty-four university presidents who come from many different types of institutions, with very different viewpoints. But they share in common some very strong opinions and a passionate willingness to express them. And that passion is reflected in the work that has emerged from the

Commission.

Some believe that timing is everything, and perhaps the most important part of the Commission's work, in terms of its relevance, is its timing.

The Context for Change

It could easily sound like hyperbole to stand up here and say that we have entered an era of change that is unprecedented in the history of American higher education. But many of us believe that it is true.

There was a time when universities were content to adopt a sort of "Field of Dreams" approach to life — if we build it, they will come. For most of our history, we were omniscient, omnipotent elders who told our customers — our students — what they needed, when they could get it, and what they would pay for it. But those days are rapidly becoming a fond and distant memory. Changes in technology, demographics, competition, and legislative expectations are all coming together to alter the way we operate.

At the same time, competition between universities and other agencies for use of state tax dollars is becoming ever more severe. In Pennsylvania, tuition has replaced state support as the primary source of funding for state-related universities. While this phenomenon is more pronounced in Pennsylvania, virtually every state has seen a similar trend.

Two years ago, the Council for Aid to Education said that assuming tuition increases no faster than inflation, by 2015, U.S. colleges and universities will fall $38 billion short of the annual budget they will need to educate the student population. Our institutions find themselves in a changing marketplace with changes in the traditional assumptions about higher education that include broad attacks on everything from tenure to increasing tuition to faculty workloads to the role of research to the place of affirmative action.

As if that were not enough, all of this occurs as we are being expected to educate more students more efficiently. The U.S. population has doubled since 1930, but during that same time, enrollment in higher education has expanded tenfold. In the past fifty years, college attendance has ballooned from roughly 25 percent to 60 percent of each high school graduating class. It has been estimated that our nation must be prepared to educate 4 million more students by 2015 simply because of population growth. As the proportion of the population that wants to attend college also increases, that number will be even higher.

And those students are very diverse. Adult and part-time students have been the fastest growing segment of higher education enrollments. Adult students — those age 25 or older — now represent about 43 percent of our students nationwide. Minority enrollments totaled 26 percent in 1996, compared to 16 percent two decades before.

Greater racial and ethnic diversity can be anticipated for the future as a result of the growth rates for minority populations in the United States.

These trends present either an insurmountable challenge or an extraordinary opportunity. The nation's public universities are mobilizing to take charge of the change that surrounds them, led in this effort by the Kellogg Commission. The opening statement for the commission said this: "Institutions ignore a changing environment at their peril. Like dinosaurs, they risk becoming exhibits in a kind of cultural Jurassic Park: places of great interest and curiosity, increasingly irrelevant in a world that has passed them by. Higher education cannot afford to let this happen."

There is emerging a renewed commitment to outreach, to students, to progress, recognizing that higher learning must keep up with the profound changes that are taking place in society if universities are to remain centers of learning for future.

A central theme for the Commission — that our universities must be fully engaged with our communities — has everything to do with the public confidence and support we can expect to win in the years ahead.

The Engaged University

In the view of the Commission, change must come from within our institutions in response to the changes that are all around us.

Our discussions have been framed around the tripartite mission of teaching, research, and service that is the tradition of so many of America's universities and that has proven again and again its value to the progress of the nation. The grassroots learning communities fostered by Cooperative Extension, the support for lifelong learning provided by continuing and distance education and public broadcasting, and the partnerships underlying technology transfer activities that are hallmarks of public and land-grant universities all were ahead of the times in encouraging a learning society that has now fully emerged. Although closely associated with the land-grant movement, these are elements of broad relevance throughout higher education today.

We are entering a new chapter in the evolution of our institutions. There is emerging a renewed commitment to outreach, to students, to progress, recognizing that higher learning must keep up with the profound changes that are taking place in society if universities are to remain centers of learning for the future. If we are not supportive of the learning needs of people of all ages and the expanding knowledge needs of society, other educational enterprises will surely supersede us in this intellectually demanding world — enterprises that won't have the rich interplay of disciplines and missions that makes the university so well suited to promote economic, human, and cultural progress.

So what does it mean to be an engaged university? In our discussions within the Kellogg Commission, at the most fundamental level, it means three things:

- An engaged institution must be responsive to the needs of today's students and tomorrow's — not yesterday's.
- It will enrich student experiences by bringing research and engagement into the curriculum and offering practical opportunities for students to prepare for the world they will enter.
- And it will put knowledge and expertise to work on problems its community faces.

Putting Students First

Many of you may have been thinking about engagement primarily in terms of a new twist on outreach and therefore may be surprised to hear me speak about students first. While the nature of our relationship with our many communities certainly is a critical part of engagement, putting students first is vital as well. Through their teaching mission, America's colleges and universities have a profound potential to influence the future of what is now commonly characterized as a learning society. The key, in the view of the Kellogg Commission, is to broaden our notion of students to include so-called nontraditional learners of many different circumstances, to place them at the center of our learning communities, and to be committed to meeting their needs, wherever they are, whatever they need, and whenever they need it.

Institutional flexibility is an essential characteristic in serving a diverse group of learners across the life span. We are greatly assisted in embracing this quality by the new technologies that are highly supportive of anywhere, anytime learning. I am not one who believes that modern information technologies will displace the primacy of resident instruction in institutions such as ours. But I believe that the most significant growth area in American higher education will be in distance and continuing education.

It is for this reason that Penn State created the World Campus, a virtual university whose students are location-bound, including those whose learning endeavors occur in the workplace. It is amazing to me that we had about 1,000 enrollments in our first year of operation. Other universities, not-for-profit and for-profit, are launching such ventures. As with all IT [information technology] ventures, only some of us will flourish, especially since new economic models are required for this kind of education.

Opening up our institutions to new audiences through technology, satellite locations, flexibility in scheduling, simplified policies and procedures, expanded support services, and other such efforts is just one part of putting students first. An engaged institution also will focus on the quality of the educational experience, making every effort to prepare learners for the challenges of life in contemporary society. In other words, our curricula — and I use that term in the broadest sense to encompass the full range of learning opportunities the university provides — must be fresh, they must be forward looking, and they must be faithful to the concern for improving the quality of life.

Old models of education no longer apply.

Certainly, we must continue to encourage the development of skills, but these now include the skills of information science and technology needed by all students and the multicultural skills that undergird success in an internationalized society. As always, we must continue to expose students to new perspectives and convey the essence of a given field to its majors, but we do so now realizing that such efforts represent only a shrinking sample of what might be studied or a freeze-frame in a body of knowledge subject to exponential growth and inevitable change.

Given these constraints, and recognizing that in an increasingly complex world the ability to understand, to evaluate, and to respond creatively to challenge and change will influence virtually all aspects of life, we must somehow equip students to continue to learn long after they leave us. Equally important, we must open their hearts as well as their minds to this task. Intellectual capital is of tremendous importance to the future. Yet so is the extent to which our institutions promote character, conscience, citizenship, and social responsibility among those whose lives we touch.

In the view of the Kellogg Commission, involving students in meaningful research and integrating the community into the academic experiences of our students are promising approaches.

Research opportunities give students important experience in problem solving, critical thinking, teamwork, and communication — all useful lifetime skills.

Internships, practicums, and service learning opportunities make the context for learning real-life situations in businesses, organizations, and communities. These experiences have many rewards. For students, they provide the impetus for critical reflection, expand horizons, and encourage responsibility and good citizenship — be it in the workplace or in the community. For the organizations involved, there is work of value being done, often on a volunteer basis. Our universities benefit as well from the good will and partnerships such activities foster.

Most universities offer these experiences. Yet such efforts can be greatly expanded to involve more students and can be integrated more closely into the overall educational experience.

Putting Knowledge to Work

If one characteristic of an engaged university is putting students first, another is putting knowledge to work. Through our research capacity and the expertise of faculty, institutions such as ours have tremendous resources for enhancing the quality of life. This has been demonstrated time and again in the role of the nation’s universities in promoting economic development through technology transfer. Our role in promoting human development also has contributed much to the health and well-being of people throughout the life span. Yet the needs of society remain great: the Kellogg Commission has identified on its list of potential areas for university engagement the many issues related to education and the economy; agriculture and food; rural America, urban revitalization, and community development; health care; children, youth, and families; and the environment and natural resources. There are others that could be added as well.

Despite our historic involvement in such areas, issues of policy, practice, and perception prevent universities from engaging with them as fully as we might.

It's been said, for example, that universities have disciplines, while people have problems. The academic culture tends to be such that the reward structure reinforces allegiance to the discipline nationally and internationally. This deters faculty from a broader institutional agenda of outreach and engagement, yet faculty involvement is absolutely essential in creating truly engaged institutions. It also discourages the interdisciplinary approaches most in keeping with the complex problems of our society.

The university culture also tends to be a bit lofty. We have to be open to learning from and with our collaborators in the community. Engagement is really a two-way street that should impact the university as much as it impacts our partners. **Peter Magrath,** president of NASULGC [the National Association of State Universities and Land-Grant Colleges], has called this "inreach." In the words of the Kellogg Commission, "The purpose of engagement is not to provide the university's superior expertise to the community, but to encourage joint academic-community definitions of problems, solutions, and success."

I am not saying that *all* faculty must be individually involved in the engagement agenda. There must always be a place for basic research within our universities. But if the collective faculty agenda is not one of engagement, our universities simply will not make the difference they should. The leadership of faculty, by virtue of our shared governance systems, has a tremendous influence on everything our institutions do.

Among other factors that work against engagement, universities are characteristically slow to respond. At the same time, it can be difficult to make the long-term commitments that gain the confidence and trust of community partners, particularly in assuring the stability of funding necessary to support long-term relationships.

Transformational Strategies

The Kellogg Commission has identified five strategies we believe are necessary to make universities fully effective partners for the 21st century. These are deceivingly simple at face value, but their underlying implications are so substantial that we are really talking about a transformation in our institutions.

First, institutional leaders must work to make engagement so much a priority that it becomes part of the core mission of the university. It must be reflected in the full range of activities and in every field of endeavor.

Second, specific engagement plans must be developed that recognize that this priority is not something separate and distinct, but built into everything we do.

Third, interdisciplinary research, teaching, and learning must be encouraged as part of the engagement agenda.

Fourth, incentives must be developed to encourage faculty and student engagement. There are a number of dimensions here, among them promotion and tenure review, balancing individual faculty involvement with the collective contributions of a department, and even the role played by accrediting bodies and other external agencies.

Finally, secure funding streams must be sought to support engagement activities. Partnerships, fees, and internal allocations are all possibilities. The greatest promise seems to lie in developing new partnerships with public agencies and the private sector.

The Penn State Model

In following these strategies, no two institutions will be alike in the ways engagement becomes manifest within them. Let me share with you briefly some of the things we are doing at Penn State. Our model emphasizes the integration of teaching, research, and service.

This integration cuts across disciplinary lines to address important societal issues in terms useful to the people who live and work in the communities we share. Five interdisciplinary areas have been identified for special initiatives: the life sciences, materials science, environmental studies, information sciences and technology, and children, youth, and families. We have made a multiyear commitment in each of these areas to build faculty, enhance programs, and encourage collaboration, both internally and with relevant corporate and community partners.

In the case of information sciences and technology, I am pleased to note, we have moved with lightning speed to create a new school to address the tremendous workforce needs for skills in this area. Just one year after approval of the school, we welcomed our first students this semester [fall 1999]. It is a model of engagement, having been built from the ground up in partnership with the businesses and industries it will serve, a continuing partnership we view as essential to the school's success.

I also wish to note that our focused initiative related to children, youth, and families is not really a new priority for Penn State. The foundation for such an initiative had been well in place in our Colleges of Health and Human Development, Education, Medicine, Agricultural Sciences, the Liberal Arts, and Law, in concert with the outreach experience of our campuses, Cooperative Extension, Continuing and Distance Education, and other programs. Yet these were diffuse efforts that did not achieve the synergy needed to make a difference on one of the most pressing challenges facing our society: the healthy development of our youth, who for many reasons are much at risk. It was also the case that the University's role in promoting human development often took a back seat to initiatives targeted to economic development. With our newly focused priority on children, youth, and families, the many relevant forces at Penn State are being marshaled to address their important needs.

In these five areas of interdisciplinary priority and in most others as well, we are creating new opportunities for students to venture out of the classroom and into the community. For example, in our new School of Information Sciences and Technology, internships and other practicum experiences are being built into the curriculum. Service learning is capturing the imagination of both students and faculty. Our Schreyer Honors College is among the campus leaders in this effort; it is the goal of the college that every one of its students has at least one reflective service experience.

We also have restructured Penn State in a number of ways to develop more effective linkages with partners and constituents. The outreach function has been strengthened by creating a partnership of two major and previously disconnected units of the University to serve the needs of the public better. This is the joining of Penn State Cooperative Extension and Continuing and Distance Education and Public Broadcasting under a new position of Vice President for Outreach and Cooperative Extension. Our technology transfer units are more closely bridged to this new unit as well. The purpose is to enhance participation, coordination, and collaboration across the University in bringing the resources of all Penn State colleges to the people of Pennsylvania.

Penn State has a network of twenty-four campuses throughout the state. In the past, most of these campuses have emphasized lower-division instruction. Restructuring has added flexibility to offer baccalaureate degree opportunities to meet the needs of location-bound learners and local employees. This has positioned our campuses better than ever to partner with communities and be more responsive in meeting local needs.

The Penn State faculty reward system has been restructured to encourage outreach in teaching, research, and service within the criteria for tenure and promotion. In addition, the University Faculty Senate has a standing Committee on Outreach that is responsible for identifying such efforts, establishing evaluation methodologies to ensure quality, and creating recognition measures to reward outstanding performance.

These changes have created a substantial network of individuals who can and are working collaboratively to effect change. We also have given our University family a rallying cry — a slogan, if you will — that coalesces our many efforts into a unified vision. It is *Penn State: Making Life Better*. We have used this message on everything from public communications campaigns to our state funding request. It expresses the bottom line for our University.

The Future

In closing, let me say that broad societal change has created unprecedented opportunities for the nation’s universities to become fully engaged with their communities and make a difference in the quality of life. From my vantage point on the

Kellogg Commission and at Penn State, I believe we are entering an era of heightened responsiveness among our institutions that will prove highly rewarding in the years to come.

This transformation will change our focus from teaching to learning, out of a concern for outcomes. Research will be part of a broader emphasis on scholarship that recognizes not just discovery, but also the application and dissemination of knowledge. And the notion of service to society will be a guiding force for virtually every area of institutional endeavor.

I can't think of a more promising future, and I am thrilled that so many in higher education share this vision of engagement.

Graham Spanier
President of Penn State University

Academic Leaders Discuss How to Make the Engaged Institution a Reality

By Deborah A. Benedetti
Staff Writer
Outreach Communications
Penn State University


Patricia A. Book

How can land-grant and major state universities become the engaged institutions envisioned by the Kellogg Commission on the Future of State and Land-Grant Universities? The conference on Best Practices in Outreach and Public Service: The Scholarship of Engagement offered the first national forum for discussing the issues, challenges, and opportunities involved in creating engaged institutions.


Barry Checkoway

Penn State President **Graham Spanier** and a distinguished panel of academic leaders from around the nation discussed the issues institutions must consider as they move toward making the engaged institution concept a reality at their colleges and universities. The framework for conference discussions is the Kellogg Commission report *Returning to Our Roots: The Engaged Institution*, published in February 1999.


Lawrence Cote

Panelists who responded to President Spanier's address on "The Engaged University" were **Barry Checkoway**, professor of social work and urban planning and director of the Center for Community Service and Learning at the University of Michigan; **Lawrence Cote**, associate provost for extension and public service and director of the Cooperative Extension Service at West Virginia University; **Arlen Leholm**, director of extension at Michigan State University; and **Patricia A. Book,** associate vice president for outreach and executive director of the Division of Continuing Education at Penn State University.


Arlen Leholm

In his remarks about the role of the faculty in an engaged institution, **Barry Checkoway** noted that "Graham Spanier argues that the context of higher education is changing, and as it does, the changes are challenging the university to develop its capacity for engagement in the years ahead. The old models for education no longer apply."

Checkoway asked: What models will be needed for an engaged university? What will be required for faculty members in an engaged university?

"I assume faculty will have a major role to play, because they manage the curricula. They teach the courses that prepare students for participation in a democratic society — both traditional classroom courses and community-based learning of a variety of types in which students participate in the community and learn from the experience as an integral part of their education. Faculty oversee these community learning experiences. They also conduct research that involves communities and can improve communities, employing methodologies that treat communities as partners and participants, rather than as human subjects and passive participants in the research.

"Faculty provide consultation and technical assistance which enable us to draw on their expertise for the benefit of society. Faculty play key collaborative roles in partnerships that bridge campus and community and make genuine contributions that improve the quality of life. They have roles, responsibilities and relationships that can influence the implementation of innovation and change in the university, and lacking the faculty, nothing lasting is likely to happen."

However, there are obstacles to involving faculty in the engaged institution, Checkoway said.

"First, faculty view themselves primarily as teachers and researchers with commitments to their disciplines. This doesn't necessarily translate into playing public roles in society. Faculty do not perceive themselves as central to the outreach and service work of the university.

"Second, faculty perceptions are shaped by an academic culture which runs contrary to the idea of the engaged university. University gatekeepers dissuade them from public engagement. It's not central to their role; there are few rewards for this work; and it may even jeopardize their careers in the academy. This is what many faculty believe, and its change is an enormous undertaking.

"The third obstacle is the reward structure of the university. Faculty should be rewarded for the work they do. It is a legitimate part of the academy. However, the present reward structure at many universities places emphasis on what **Ernest Boyer** called 'the scholarship of new knowledge creation,' not on the scholarship of integration or engagement. That's also important, but secondary to new knowledge creation and its publication in scholarly journals."

Checkoway added, "The present structure is based on the assumption that if faculty focus on their research and teaching, they will be better researchers and teachers, and if they spend too much time on other things, it might put them at risk for promotion and tenure and affect the quality of their research and teaching. The irony is that faculty who engage in the larger society are going to be better teachers and researchers, not worse. When individuals or institutions hold beliefs or provide rewards that run contrary to the reality and facts of the matter, a problem exists.

"In the end, the clear evidence is that, with the resources and superbly qualified professors and staff on our campuses, we can organize our institutions to serve both local and national needs in a more coherent and effective way. We can and must do better."

– Kellog Commission on Future of State and Land-Grant Universities

Returning to Our Roots: The Engaged Institution

"To realize the engaged university envisioned by Graham Spanier, there will be a need for formulating strategy and reconceptualizing the notion of research and teaching. This will involve changing the culture of the institution, modifying the reward structure and many other serious steps that will challenge the status quo in American higher education and are of no small consequence. They will evoke counterforce in many university institutions, but this is normal in any serious effort at institutional change," Checkoway added.

Lawrence Cote said, "There is an essential need for deep, lasting fundamental change in the core culture of many of our institutions, from research I multi-universities to liberal arts colleges that wish to embrace engagement. I'm so pleased that Graham Spanier and twenty-three other university presidents, with the Kellogg Commission, have taken on the report *Returning to Our Roots: The Engaged Institution.* The timing is right for this report, because society is demanding that we change — not just the multiversities (a term invented by **Clark Kerr**), but all of us in higher education. It's very appropriate that the Kellogg Commission report on student-centeredness came first and that the second report focused on student access.

"Returning to Our Roots: The Engaged Institution is not just another report. Those of us who have labored in the vineyards of outreach appreciate this report. Graham Spanier's phrase 'institutional flexibility' is an essential characteristic in serving a diverse group of learners across the life span. West Virginia University President **David Hardesty** talks about workforce development as one important example of engagement. Workforce development is really everybody's job. Tinkering at the edges is no longer enough."

Cote noted that Cooperative Extension's traditional linear approach of doing research, teaching it, and applying it in the field needs to be updated.

"Today, you're conducting research 'live,' including it in teaching, and helping practice at the same time. The active role of our learning partners is essential in this approach. The other aspect of engagement is community-based learning as complementary to and integrated with on-campus learning.

"At West Virginia University, we're in the second year of a four-year Community Partnerships Program that's also funded by the Kellogg Foundation. It mirrors a program funded in the early 1990s at Northeastern University, East Tennessee State University, the University of Texas at El Paso, and West Virginia University. In that program, we reinvented medical and health sciences education. We've gone from being a campus-bound enclave for medical education to having 110 rural health clinics. As part of this new approach, we now require community rural rotations in all three medical schools in the state. We are now applying this successful model to the rest of the university. Eventually, all students and faculty at WVU will have service learning and community-based problem-solving as part of their degree programs. The model each of our institutions develops in this Kellogg-funded consortium must fit the culture of that institution and of our particular state's or region's needs."

Cote pointed out that West Virginia is a state with one of the highest poverty levels, and many families are in need of direct assistance. West Virginia University is aggressively working on these issues in the face of some difficult obstacles.

“Those of us who have spent most of our time in outreach roles have to learn to drop the language barriers. Cooperative Extension. Continuing education. Distance education. Technology transfer. Economic development. We have built barriers that hamper achieving what is now a shared mission. We’re captive of our concepts and languages. We must know and meet the ever-changing needs of citizens, communities, and all three employment sectors (government, nonprofit, and for-profit). Our goal at West Virginia University is to be second to none in understanding our communities’ needs and responding with appropriate university programs — Extension or not.”

Cote advocates developing a scholarship of service for faculty. As part of this process, a rigorous and manageable means of evaluating service will be needed.

“Evaluating service need not be as complex and time-consuming as current portfolio assessment and the like require. It is critical that we distinguish between good and bad service, but do so more efficiently than current practice,” he said.

“I love the land-grant concept,” Cote added. “We’re seeing its reinvention and redefinition in a new century. Those of us in outreach have reached the promised land.” Yet he noted, “We need to remember that now it is not just Extension and outreach professionals engaging society; it is the entire university.”

Speaking as the director of a large land-grant Extension service at Michigan State University and a community development practitioner, **Arlen Leholm** focused his comments on the attributes of an engaged institution and the value-added potential of Cooperative Extension services.

An engaged institution, Leholm said, involves shared leadership and shared power — practiced throughout the university and with communities and stakeholders. An engaged institution is genuinely dedicated to the empowerment of others, gives all voices an opportunity to be heard, and has the capacity to make internal changes in response to external needs.

“Nothing will kill engagement more than command-and-control mindsets,” he said. “Really understanding empowerment is important. It’s important for faculty very early in their careers to have the opportunity to work at the community level. If they can feel it and see it and do it, they will have a much better notion of engagement and the two-way street of sharing power with communities. However, faculty will not become involved in engagement if they are not rewarded.”

Leholm also stressed that “higher education institutions must be for everyone. We must understand issues and needs and have true partnerships with our communities. We must also have the capacity to make internal changes, such as dealing with the reward structures for faculty. We need to build research outreach linkages that really work. I’m working on that concept in a project in India.”

Leholm said the potential for adding value comes into play through:

- Externships, which enhance service learning for students and also benefit firms, communities, and universities by increasing recruitment opportunities. “Having local connections all across the United States is very important,” he added.

- Social capital, which increases trust and access through local and neighborhood educators, reduces community dependency, and expands community access to timely university research. “We’ve done this in rural areas through Cooperative Extension. Now we need an urban agenda. If you do not have trust, very little else will work. Trust can be greatly enhanced by Extension,” Leholm said.

- Continuity for university—community partnerships. These partnerships need an exit strategy for faculty. At the same time, “many communities have felt like guinea pigs. Communities need to know that they are not just laboratories for the university. As we all know, it’s much easier to get into partnerships than it is to get out of them,” he said. “When faculty leave a project, we can make this transition easier.”

“To make the engaged institution concept work, we need locally based partners and neighborhood educators,” he said. “The neighborhood educator is a person who is highly skilled in working with communities. I believe these neighborhood educators can play a huge role in advancing land-grants and other institutions.”

Leholm also pointed out the importance of listening to all of the voices in the community.

“We must not just be for the rich and powerful. We must share power, which is not an easy thing to do. And we must use all of our assets in the university and community. If we do this, we can enhance Penn State’s slogan ‘Making Life Better’ for all.”

In her response to the keynote address, **Patricia A. Book** said, “What struck me the most about President Spanier’s remarks was his focus on the future of higher education. He said, ‘We are in an era of change.’ And change can make us fearful about the things we’re unsure of. I think higher education is in a classic midlife crisis.”

She cited President Spanier’s discussion about changing demographics and the adult students enrolled in higher education, noting “43 percent of our students are adult students. Getting an education once is no longer sufficient.” Book added that **Don A. Dillman** and his colleagues’ survey of adults across the United States shows that continuing education is already a reality for most adults in today’s knowledge-based economy. *(The survey report, “What the Public Wants from Higher Education: Work Force Implications from a 1995 National Survey,” was published by the Social and Economic Sciences Research Center, Washington State University, Pullman, Wash.)* The survey found:

- 81 percent think getting additional education is important for success at work.
- 75 percent expressed interest in continuing their education in the future.
- 50 percent said they would enroll in a credit course in the next three years.

- More than 75 percent said they would enroll in a noncredit course.
- 80 percent said they had participated in work-related education and training.

“Those surveyed said their biggest concerns were time constraints and convenient access to education,” Book said. “Our challenge in higher education is to meet the public’s demand to tailor our educational offerings to serve adult students with alternative formats and delivery mechanisms. Adult students are looking for planning, flexibility, and choice.

“In the area of planning,” she added, “President Spanier made a strong case for why we need to think more carefully about higher education and who our students are. This is an undergirding principle in the Kellogg Commission report *Returning to Our Roots: The Engaged Institution* — the relevance of what we do and our work; the interdisciplinarity of our work.”

Flexibility or fluidity is an equally important concept to adult students, Book said.

“As President Spanier discussed in his address, rigid models and dominance models of organizations won’t work in the future. He talked about cooperation, collaboration with communities and two-way collaborative networks, responsive structures and rapid response to describe university-community partnerships. Some of our structures have been slow to respond, because of the complexity of our procedures.”

Choice is another important issue for adult students, she said.

“We are facing a changing marketplace in higher education. There are multiple and new providers getting involved in this area, from market-driven and proprietary organizations to corporate universities, but can they do what we do? Can they engage their adult learners in the transformational process of education as we do?”

Book also cited President Spanier’s discussions about the many ways for institutions to become engaged and to prepare students for the world of work and for making contributions to society. Faculty have a critical role to play in engagement, she said.

“Faculty are more involved in outreach than we may think. We surveyed Penn State faculty and found that 60 percent have been involved in outreach, and of these, 75 percent tell us they’re very active. Most are tenured. They are finding meaning and personal rewards in this work. Our challenge is to help faculty and staff become engaged in outreach and to reduce the fear element. People see what they might gain, but they also see what they might lose. Our University leaders bring a genuine passion and commitment to advancing the outreach mission,” Book said.

Following the panelists’ comments, **Graham Spanier** discussed two general themes that emerged during the discussions: motivating and rewarding outreach efforts and obstacles to engagement.

“I do believe that leadership does make a difference — even in academe,” Spanier said.

“People will follow good leadership. It’s not just the leadership of presidents that’s important (it needs to start there), but we need good leaders at other levels within the institution.”

It’s also important to realize that everyone does not have to be involved in outreach for an institution to be fully engaged, he said.

“We just need a critical mass. Identify who your champions are going to be and work with them,” Spanier said.

With a dedicated cadre of faculty and staff involved in outreach, an engaged institution has a built-in advantage in trying to make progress on its outreach agenda. An engaged institution can demonstrate in hundreds of ways how it makes a difference in the lives of the individuals, organizations, and communities it serves, Spanier said.

“It is inherently rewarding to be successful at something. The key is in what Barry Checkoway and Larry Cote were saying: We must demonstrate to our faculty that teaching and research are enhanced by service-engaging outreach. As long as we think of outreach as a separate entity competing for attention, it’s never really going to happen. As an assistant professor, it was so rewarding to make these connections and bring this back into the classroom.”

Some of the obstacles to engagement deal with “the inability of some people working on this engagement agenda to integrate it into the university’s administrative structure,” Spanier said. “Many working in this area feel like outsiders in their own universities. That does not mean everybody in the university has to do what we did (create a vice presidential position for outreach), although it helps in our case.”

Access is another potential barrier, he said. Do the people providing leadership for outreach have access to deans, vice presidents, and others to be able to achieve the desired level of engagement?

“At many land-grant and state universities, we still look at certain things related to outreach as ‘extra duties,’ and we have systems where outreach is rewarded as extra compensation. That’s just never going to work. Until outreach is fully integrated into the workload of people on the campuses, it will never be seen as a full-fledged partner. That’s an obstacle that has to be overcome,” Spanier said.

During the question-and-answer session that followed, Spanier also addressed the issue of funding for outreach. He emphasized that Penn State is receiving a declining percentage of funding from the Pennsylvania government.

“I don’t think we’re going to continue to get much state funding just because we are Pennsylvania’s land-grant university. So much of what we do in the outreach arena we’re going to have to do in a more market-driven and entrepreneurial fashion. This is the sort of thing that makes academic folks nervous, and it’s happening more and more. Where is all the funding to come from? Are we supposed to reallocate funds from undergraduate tuition to support Cooperative Extension or any of the other areas of the outreach initiative that we support? The old funding formulas aren't working. We have great resources and expertise, but we can't operate the university as a charitable organization."

Barry Checkoway
Professor of Social Work and Urban Planning
Director, Center for Community Service and Learning
University of Michigan

Lawrence Cote
Associate Provost for Extension and Public Service
Director, Cooperative Extension Service
West Virginia University

Arlen Leholm
Director of Extension
Michigan State University

Patricia A. Book
Associate Vice President for Outreach
Executive Director, Division of Continuing Education
Penn State University

“Advancing Science for the Public Good Within the Engaged University”

By Anne C. Petersen
Senior Vice President for Programs
W.K. Kellogg Foundation

Thanks for the introduction. I’m delighted to be back; it’s great to see old friends and some new faces.

Anne C. Petersen

My family and I enjoyed a wonderful decade at Penn State. Our children did not move willingly — in fact our daughter had just begun college and said that we took away her “hometown.” But all of us in the Petersen family are delighted by the opportunity to maintain our ties by rooting for a winning football team with a coach who is a terrific person and who has always aligned athletics with academics, to use the terms of the Kellogg Commission.

It is very exciting to hear about the way in which Penn State, under the leadership of **Graham Spanier**, is responding to the tremendous challenges currently faced by universities. The directions he articulated in his address resonate exceedingly well with the Kellogg Foundation. I applaud his efforts.

I am honored to have been asked to participate in this conference on university outreach and public service. It is extremely important for universities to engage communities and the broader public with the work and resources of universities. My personal values and priorities, as well as those of the Kellogg Foundation, fit squarely with the focus of this conference.

Three academics ... a physicist, a humanities scholar, and an economist from an unnamed university ... found themselves stranded on a desert island. They were making the best of it and had learned to survive quite ably in their primitive surroundings by forming a committee. One day, one of them picked up a small glass bottle that had washed onto the beach. He pulled the cork from the bottle and a genie appeared in a puff of smoke. The genie said, “For releasing me from my captivity in the bottle, I will grant each of you one wish.” The physicist said, “I wish to be back in my lab monitoring my experiments again.” Poof, she disappears, leaving a faint wisp of smoke. The humanities scholar then said, “I wish to be back studying the ancient texts and manuscripts.” Poof, and he too disappears. The economist then says, “Gee, I was really enjoying it here. I wish the other two were back.” Poof ... Poof!

The point is that you have to look at the bigger picture when you’re making your wishes about the future, or you’ll never end up where you want to be.

For universities, where they will “end up” is still open to debate. Society is moving so quickly that the wise university must have a clear sense of its strengths and niche and use these to capitalize on opportunities to meet societal needs. The university that fails to take in the big picture is in danger of being swept into irrelevance.

Challenges Confronting Universities

Significant challenges confront universities these days. President Spanier mentioned many of them. I want to emphasize a few that I think are especially significant.

- Being seen as irrelevant as educators.

  Many newcomers have entered the higher education business and are competing effectively for students by offering convenience and alternative modes of delivery. Some of the alternate providers are competing by using the greatest assets of outstanding universities — the most eminent faculty to teach courses in their areas of expertise.

- Changing student body.

  The student population is increasingly diverse — both ethnically and in terms of interests. Most students are savvy about the workforce and want marketable skills — upon graduation and for their jobs to come.

- Increasing accountabilities.

  Universities now recognize the need to be accountable to trustees, legislators, donors, and parents. The community to whom universities are accountable is growing daily as global boundaries disappear and as whole new standards for accountability are being applied. Universities are being held accountable for educating people to compete in a global marketplace and to work with diverse populations.

- Place bound.

  Some even say that the Internet has made the whole model of a bricks-and-mortar university outdated. I would argue that there will always be a need for some campus-based universities, but this argument rests largely on the developmental needs of young adults, rather than on what constitutes the most effective education.

The point here is not that universities should focus only on practical information relevant to jobs. Rather they must find an appropriate balance among traditional liberal education — including arts and humanities and current usable knowledge for jobs. In addition, universities must take seriously the need — especially for undergraduates — to learn how to learn, an essential skill for lifelong learning. And the framework for curricular offerings at any specific college or university should derive from that institution’s strengths and history.

Public Education

Public universities have a proud tradition. It was the influence of universities, and particularly university research, that brought this country from the agrarian age to the industrial age and to the information and telecommunications age.

Most of the people you know who have a four-year college degree got it at a public university. Nearly two-thirds of all bachelor’s degrees and nearly three-quarters of all doctoral degrees are awarded by public institutions. Universities award 70 percent of the nation’s engineering and technical degrees. It is an ironic fact that the industry leaders who have turned this economy into such a fast-paced blur got their training at the very universities they now call stodgy.

But universities are discovering that a proud tradition is not enough. People are frustrated by what they see as the unresponsiveness of universities. The perception is that universities are out of touch and out of date. They are somehow apart from what is "real."

The comedian **George Carlin** had a routine where he sneered at baseball as not being a real sport. He said that football was a real sport. In football, the player is tackled. In baseball, he is ... tagged. In football, the player runs down the field, breaks through the line, and scores a touchdown. In baseball, the player ... runs home. In football, you get a penalty! In baseball, you get — whoops! — an error.

For many people today, universities are just way too precious. Over the past several years, in my various roles, I have heard some extremely negative views of universities. The most extreme believe that if life is a football game, university life is a leisurely day at the baseball park. While society is grappling with hard problems — plague, famine, war — universities have ... “disciplines.” While society is moving forward, universities are studying things to death.

Does that make your blood boil? It does mine. But we must identify what we can learn from such views. What are universities studying? Let me be clear. I feel strongly that universities have an important and nearly unique role to conduct basic research as the “seed corn” for research that will eventually yield productive crops — to use an agricultural metaphor. I also believe that we scientists have become too fat and happy with the riches of federal and other research funds. We know from research that “too fat” is not a healthy state, but can anyone ever be “too happy”? I believe that research is like many important endeavors in life — without challenge, many of us slip into doing the same old things and may even be rewarded for it. Some research is lacking in vision and is entirely too narrow. And we have not done a good job of differentiating work that produces scientific or scholarly advance from that which simply serves to maintain faculty or a discipline. More importantly, we are not using the knowledge and skills we have to address many extremely important societal issues. Not all faculty must or even should do this sort of research. But some should do it and be appropriately rewarded for socially relevant research.

The Engaged University

Fortunately, the Kellogg Commission has worked through major components of a solution for universities today. I believe that the reports of this Commission thus far constitute tremendous accomplishments. Lest you think I am simply bragging, let me note that the Kellogg Foundation has only provided the funding for this work; the twenty-four presidents who constitute the Commission have provided the brains and experience to craft a powerful proposal for transforming the university. **Jim Ryan** mentioned in his introduction of President Spanier that he is a magician — perhaps those skills have helped him work magic with the Kellogg Commission!

Many smart people have discussed and diagnosed the problems of the modern research university over the past decade or so. Most agree that there is no single problem, and any solution will need to deal with the entire system of issues. Most of the reports have been rather depressing and pessimistic about the likelihood of solution. And many have believed that sitting presidents would not be able to lead their institutions out of the problems, because the solutions would be so unpopular. But this group of sitting university presidents has taken the first step to articulate some solutions framed within a new kind of public institution, one that involves the "creative co-existence between individual brilliance and strategic institutional alignment" with the critical functions of "learning, discovery, and engagement." [source: Kellogg Commission report, *www.nasulgc.org/Kellog/*]

Do you want to see an engaged university? Look around. Penn State is doing a lot of things right to engage various communities, as you've just heard from President Graham Spanier. Penn State is clearly at the front of the pack in developing an outstanding model of the engaged university.

The Kellogg Commission has identified many different activities that engage communities.

- For example, the University of Illinois at Chicago (UIC) has a Great Cities Program that dedicates the university's teaching, research, and service programs to urban issues in Chicago. UIC engages partners in health and health care, from individual patients to state health centers and pharmaceutical corporations. UIC also engages partners in technology transfer; the colleges of business and engineering have partners ranging from Fortune 500 corporations to family-owned startup firms.
- Given that Iowa is an agricultural state, Iowa State University has produced an economic development plan with focus on strengthening production agriculture and developing new products and markets for Iowa's ag commodities.
- Tuskegee University was engaged from the beginning. Not long after the university was established, the southern economy faltered. **Dr. George**

Washington Carver introduced crop rotations and other scientific innovations which helped the southern agricultural economy survive. Today, Tuskegee continues to engage the local community in a variety of partnerships designed to encourage minority students toward careers in research and engineering.

- Salish Kootenai College has programs that address the high rates of poverty, illiteracy, mortality, and morbidity among the Salish and Kootenai Tribes on Montana's Flathead Reservation.
- Rutgers University uses four criteria to evaluate strategic planning initiatives: excellence, centrality to mission, diversity, and responsiveness to emerging societal needs.

The Commission has also concluded that the commitment to engagement must be pushed down from the vision statement into the curriculum and teaching mission. For example, Portland State University is explicitly supporting community-based teaching and learning. They have 150 courses in twenty-three departments. Recently, 1,000 seniors participated in community-based "capstone" courses on local issues.

Each university should decide what community to engage — the surrounding one, a city, or a state. The community being engaged will vary from university to university. Portland State's program mirrors the vision and future needs of the city of Portland. Research and scholarship at the University of Vermont is responsive to the whole state. Thus the meaning of "community" differs from case to case.

Leadership for engagement is critical, but it can come from within or outside the university. For example, the chancellor at the University of Illinois at Chicago initiated the Great Cities concept. Political leaders were behind Iowa State's efforts in agricultural biotechnology to help diversify the state's economy. And business leaders stepped up to head Arizona State's economic development efforts.

The Kellogg Commission identified seven components for the engaged university. The list reads like a guide to engagement of any kind. The engaged university is:

- Responsive.
- Respectful of partners.
- Academically neutral (or unbiased).
- Accessible.
- Consistently engaged in all functions.
- Institutionally aligned with engagement.
- Sufficient resources for engagement.

None of these elements is easy to fulfill. But incomplete or poorly designed efforts will be likely to fail.

The Land-Grant Model

Does all of this sound familiar? It should. The design of the original land-grant model — as conceived by President **Abraham Lincoln** and Vermont Congressman **Justin Morrill** — was a comprehensive one. They were expecting engaged universities. And most land-grant universities began operating this way. But somewhere along the way, some of the principles began to slip.

When I left Penn State, I became the first vice president for research at the University of Minnesota. The role also included being dean of the Graduate School, but the research role was new. So I started out by talking with each of the University's Regents Professors — those with the most prestigious title bestowed on faculty by the university. I was fascinated by what I heard over and over again. These faculty talked about the great losses in university life — they could no longer go to the faculty club and learn what exciting work colleagues from around the campus were doing. And they felt out of touch with neighbors, state representatives, local citizens — with whom they had previously had a great deal of contact. These contacts enabled them to maintain a sense of the university community and its intellectual life and to communicate that life to others outside the university. Instead, they felt that most faculty had become more tied to their disciplines and the professional societies that represent them. They attributed these changes to increasing specialization and the pressure on faculty to do so to maintain research funding — increasingly the status bearer and sustainer of faculty work. They also felt that the roles of the professor had become scattered; in the past, they felt that research, teaching, and service were much more integrated as important aspects of university life. These comments from this group of faculty represent profound insights about what had changed. They also show us the way back to recapturing the original strengths of the land-grant university. And this way back sounds a lot like the engaged university.

It is important to integrate the functions of the university — teaching, research, and service in past lingo; learning, discovery, and engagement in Kellogg Commission lingo. But it is difficult to discuss them simultaneously. So I will take them in turn, and especially speak to how each is essential to engagement.

Learning. The educational role of the university is multifaceted — usually involving broad liberal education for undergraduates and technical or professional education for all levels. The debates about what makes an educated person will surely continue unresolved for some time to come. But there is emerging consensus about some aspects. For example, one of the strongest industrial advocates of the research university, former Lockheed Martin chairman **Norman Augustine** quotes the late **Isaac Asimov** as saying, "Increasingly, our leaders must deal with the dangers that threaten the entire world, where an understanding of those dangers and the possible solutions depends on a good grasp of science. The ozone layer, the greenhouse effect, acid rain, questions of diet and heredity — all require scientific literacy. Can Americans choose the proper leaders and support the proper programs if they [themselves] are scientifically illiterate?"

Universities are creating future leaders in every field. We will get the kind of leaders we educate, and we must make society see the crucial role universities play in that education. The late **Malcolm Forbes** said that education's purpose is to replace an empty mind with an open one. That is one of the most important contributions universities are making to the future — to help students see the benefit of openness to learning from everyone and every experience. The leaders we create are, in turn, creating the future. Universities cannot do this well unless they are well connected with current society and its vision of the future.

Discovery. The generation of new knowledge is the essence of the university. It's also the least understood aspect. But it doesn't need to be. To those unfamiliar with research and its methods, it can seem like time devoted to studying the obvious or the outrageous. As a researcher myself, I have learned that I can't expect others — even research colleagues — to share my passion in my research unless I communicate clearly why it's important and what I'm finding that should matter. And it's essential to communicate about research with all those who might be interested, including students.

The big opportunity for the research university is to link student learning with discovery. The processes of learning and discovery are similar. Students can learn how knowledge is developed through the opportunity to watch, or better, to participate in it. It is not practical for every student in the large public university to participate in research. But they should have the opportunity even in large lecture classes to learn how it's done. And those who have interest or even just curiosity should have the opportunity to participate more intensely in research or scholarship.

The benefits of involving all students in research are enormous. Students learn how to learn and how knowledge is created in various fields. Students can then put knowledge into some framework so that when their knowledge is challenged — whether from inconsistent information or experience — they can modify their knowledge or refute the challenge, as appropriate. And these students will leave the university knowing more about all that goes on. They can become advocates for university learning and discovery and thereby become part of further engagement of the university.

In order to share discovery with students or others, faculty need to be able to link at least some of it with everyday experience. Unfortunately, many university researchers have become much too specialized. We cannot talk with each other, much less our neighbors, potential users of the results — or even our mothers! But we can learn to communicate about our work much more effectively. While we cannot make universities as small as they once were, we can reconnect with the ordinary people who invest in us within the university — through taxpayer dollars and gifts to the university. In the case of Penn State, these are largely the alums — a wonderful group of Penn Staters! — and all the citizens of the state who look to Penn State for knowledge about how to do things better, for new ideas, for inspiration. In turn, these "investors" have much to give beyond dollars — they can express needs to be addressed, provide feedback on the knowledge being communicated, and help us to do it better. Investors can provide important intellectual capital from which all university functions — learning, discovery, and engagement — can benefit. Partnerships with reciprocal benefit make for effective engagement!

When I was at the National Science Foundation, one area the director and I focused on was public understanding of science, because we were beginning to see an erosion of support for using taxpayer dollars for science. Many elected officials, as well as citizens, didn't see how science was relevant to their lives. Conversely, many researchers didn't feel that their research had to be connected to real life. We need to come back to what the original purpose of public funding of science was, because that included a belief that this new knowledge we are discovering through science will benefit people. This doesn't mean that all research must be practical or have immediate relevance, but we do need to be able to describe what the implications might be at some point. We must reestablish the public trust.

Given that most funded research is conducted with federal research funds, any changes in university research will need to be pursued in partnership with federal agencies. I believe that both basic and applied research should continue receiving support by universities and federal agencies. But I also believe that we researchers need to make sure that research is advancing knowledge and not just maintaining faculty or fields. (I like the Kellogg Commission criterion for discovery: not just accumulating knowledge, but reordering thought.) And researchers should take more responsibility to conduct research that is needed by society. In addition to communicating research results to the public, faculty should also give some priority to communicating and integrating new knowledge among fields and types of research. (Again the Kellogg Commission said it well — we should not aim only to know more and more about less and less.)

Outreach to key communities yields significant benefit to and from both the learning and discovery functions of the university

Many examples could be cited of research efforts that involve partnerships with industry and perhaps community groups supportive of work with for-profit business. These partnerships require a clear view of university mission and role to avoid crossing boundaries into the work of industry. And community benefit — whether at the local level or extending to the entire society — should be a criterion for selection of projects.

Community-based research most clearly yields benefit to the community. The model for community-based research began in the Netherlands and other countries of northern Europe. Loka is an organization in the United States that coordinates and advocates for this model. They report significant demand for community-based research centers. They count fifty such centers in the United States, only 6 percent of what is needed. One-third of existing centers are in universities. There are many examples of the good universities can do if research is based in the community. A few of these follow:

- Recall the recent **John Travolta** movie *A Civil Action*. It was based on a true story initially described in a book of the same title. Residents were concerned by high leukemia rates in Woburn, Massachusetts. Woburn residents and professors at the Harvard School of Public Health together designed and implemented research using epidemiological surveys and GIS [Geographic Information

Systems] mapping techniques. The resulting case against the two corporations that leaked chemicals into Woburn's water supply is the basis of the Travolta movie.

- The Childhood Cancer Research Institute, Western Shoshone and Southern Paiute tribal communities, and Clark University partnered to develop a testing and monitoring system for Native American communities living downwind of the Nevada Nuclear Testing site. This collaboration involved preparing community exposure profiles, training community members on matters of environmental health, and strategizing on nuclear contamination. The joint effort built capacity in the community and left it better prepared to deal with nuclear contamination. It also built an appreciation in these communities for the applicability of science.

- Seven of nine Manhattan bus depots (or garages) were located in disadvantaged communities. Residents of Harlem were concerned that a new bus depot was going to be built across from an intermediate school. They developed a partnership with researchers at Columbia University and health care providers at Columbia Presbyterian Medical Center and Harlem Hospital Center. Harlem high school students were enlisted to collect and analyze data on the levels of diesel exhaust exposure and lung function among a sample of Harlem junior high school students. The study showed that most Harlem adolescents had been exposed to detectable levels of diesel exhaust, placing them at risk for lung disorders such as asthma. Follow-up studies were funded and the high school students have written an article published in the peer-reviewed *American Public Health Journal.*

These are all examples of research done by community-based research centers — centers in which citizens work with researchers, and frequently become researchers, to find desperately needed answers or solutions to very real problems. Some have argued that this is less rigorous research, yet it must be highly rigorous, because lives are in the balance. There is no room for sloppiness or even slight inattention. It is important for researchers and community residents to agree on acceptable Type I and Type II error in the research. The usual scientific convention minimizes the likelihood of accepting a result when it is untrue, whereas community residents usually prefer to minimize the likelihood of rejecting a result when it is true.

I don't want you to think that the Kellogg Foundation is preaching to universities and exempting ourselves from the need to link research with community. We have been community-oriented for some time now. We also believe that science can help communities when communities are engaged with the process — from conducting the research to synthesizing the results to identifying what actions need to be taken based on the findings. Here are two examples:

- Managing Information with Rural America (MIRA) is a $16.5-million initiative to help people in rural communities determine how technology can be used to address the growing concerns of rural populations on such matters as economic development, education, health, and leadership. Community teams determine what technology is appropriate for their community and then use electronic communications and information systems for community development. Funds are provided for linkages to research and technology expertise. This initiative is part of a larger rural development program at the Kellogg Foundation that is dedicated to preserving and nurturing rural communities across the country.

- The Devolution Initiative has invested $65 million to link information with people who need it. At the beginning of the initiative, information was lacking, so significant research efforts were supported. Now the focus is on those charged with welfare and public assistance policy in five key states selected to represent variations in how the devolution of health and welfare funds to states and local areas is being handled. At a recent Kellogg board meeting, we heard a powerful statement from a Mississippi legislator about how important it was to have data on what was happening within the state. The research provided evidence where there had been conjecture about needs and problems to be addressed. The state legislator spoke of his inability to sponsor good legislation without knowing the facts. And poor districts frequently lack the human and fiscal resources to obtain this information on their own.

All of the status in universities has become connected to research to the point that fields without significant external resources have shrunk relative to fields with funding opportunities. This has led to an unbalanced university from the educational perspective. Outreach has had low status and concomitant low investment from the faculty. As strongly as I feel about the importance of discovery in a university, I feel equally strongly that it’s a real mistake for universities to overlook the opportunity to connect with people and demonstrate the importance or utility of research and scholarly work. It’s good for discovery and produces engagement.

Engagement brings everything together. Outreach to key communities yields significant benefit to and from both the learning and discovery functions of the university. Research demonstrates that learning is more effective when it can be integrated with personal experience. Experiential learning has emerged as a powerful way of demonstrating concepts. Actual participation in the research process can develop understanding of the concepts being tested, as well as develop appreciation for the scientific process itself. Engaging the community in the research and teaching missions of the university then exposes them to benefits of both. Conversely, the university gains through this outreach by building understanding and support.

The engaged university capitalizes on these exchanges as a modus operandi. We have as much to learn from those we reach and teach as they have to learn from us. This is the essence of effective outreach or engagement.

Information technology provides a new opportunity for increased reach and effectiveness of traditional models of outreach: extension and distance learning. After creating much of the initial information technology boom, universities are now behind e-commerce in developing and exploiting the potential of the technology. Universities must reenter this area.

Creating the Engaged University

Benjamin Disraeli told the House of Commons more than a hundred years ago that a university should be a place of light, of liberty, and of learning. That is still true, but I would add another "l" to the formula ... linkages. A university should provide light, liberty, and learning, but it should also link to the students and what is important to them, it should link to the community and what is relevant to it, and it should link to the future. It is the link to the future that will allow us to have a voice in what that future will look like for universities.

The late **Nelson Rockefeller** was talking about corporations when he said, "We must recognize the social responsibility of corporations, and the corporation must use its ownership of assets to reflect the best interests of the people. If we don't, they will be taken away from us." If you substitute "university" for "corporation" in that quote, it would still be true. We must recognize the social responsibility of universities ... and the university must use its ownership of assets — in this case intellectual capital — to reflect the best interests of the people. If we don't, these assets will be taken away from us.

The Kellogg Commission has developed an effective, exciting proposal for how we can all move forward to reposition the university, and science, to benefit the public good. Creating the engaged university will require tremendous work yet from all of us, and especially from the faculty. But I believe that we can do this!

Thank you.

Anne C. Petersen
Senior Vice President for Programs
W.K. Kellogg Foundation

“Only Eagles Can Soar on the Wings of Change”

By Robert Cardy
Chairman and Chief Executive Officer
Carpenter Technology Corporation
Reading, Pennsylvania


Robert Cardy

Good evening, I am not an educator. I haven’t published any books and I am not an authority on anything, but I do know a little about the specialty steel business and Carpenter Technology and some of the issues we are facing today and how those network back into what you are doing as educators. So take my remarks with that disclaimer. None of this should be written down and taken as the gospel. It is the word according to Bob.

I knew right away that I was talking to an interesting audience after **Jim Ryan** called and said, “Bob, would you talk to this group at Penn State in October?” I said, “Sure.” Then about three weeks later, I got this letter in the mail that said, “Would you please send us three copies of your remarks, so we can publish them in a post-event monograph?” What they didn’t seem to understand is that I am not good at reading speeches, but I do like eyeballs. So those of you who are getting ready to take a small nap after dinner should know that I am going to be looking at you instead of down at any notes.

Carpenter Technology Corporation

What you are going to hear from me tonight comes right out of my head and my heart, and I don’t need notes to share that with you. Let me lay the groundwork a little bit and first talk just a few minutes about Carpenter. Then I want to talk with you about people and the critical ways that they contribute to the business world and the challenges we face and what you, as educators, can do to help us with the issues that we face in that arena.

We are a specialty steel company — started in Reading, Pennsylvania, in 1889. We made metals that were turned into armor-piercing shells used in the Spanish American War. We have grown over the last 110 years into a company that makes more than 400 different alloys. We’ve made twelve acquisitions in the last five years that have taken us into powder metallurgy, injection molding of ceramics and metal powder shape technology, and all sorts of alloys that were invented in recent years. Ten percent of our annual sales come from alloys that were invented in just the last five years.

Remember the periodical table hanging on the wall in chemistry class? You would think that by 1999, the scientists could have put those elements all together in every possible combination and that there is no new alloy possible, but that is not the case. Scientists are still coming up with new combinations of alloys to meet some of the most stringent applications that you can imagine. The forms we make are all long products. That is, they are not sheet or strip or plate products. They are long in the form of billet, bar, and wire. They go from a thirty-inch round bar to a diameter that is about half the diameter of a human hair. We serve about 14,000 customers all over the world. Our primary operations today are still in Reading, Pennsylvania. We still melt there, hot roll there, finish there, and process there, but we have gotten a little more complex over time, and we have a hot rolling mill in Hartsville, South Carolina. We have a finishing facility about thirty miles north of Reading in Deer Lake, Pennsylvania. We have a ten-warehouse distribution system in Mexico. We have ceramics manufacturing in Mexico, Australia, and Switzerland. We are all over the globe and most recently signed a joint venture agreement to start up a joint venture making specialty steel in India. I will talk more about India in a minute.

So we are now around the globe, making a product line that ends up inside jet engines, inside human bodies, inside petrochemical processing applications — anything that must function under the harshest of environments, that must maintain its strength under corrosive environments.

If you have an artificial hip, thank you for the business. Your hip is made of either stainless, cobalt, chrome, or titanium. When you think about it though, as the evolution of materials takes place, one of these days, the most ideal material to put in the human body as a replacement for bone will be ceramic. It is that kind of thinking that took us from steel to titanium to metal injection molding to ceramics as we sought to be a materials provider of substance around the globe and not just a steel company with one operation in Reading.

Today, we have about 5,700 employees. We are all over the world. We deal in every conceivable time zone you can imagine. We manage seven currencies, every time zone, and every culture that you can think of that is industrialized. It is a more complex company than it was when I came to Carpenter in 1962. We have 1,100 work centers in the plant at Reading, Pennsylvania, and they are all computerized. We reschedule the mill every night to maintain our reliability for the customer. Customers are all over the globe, and they really don’t care that we are in Reading, Pennsylvania. They want to be served just as though we were next door.

It is a very complicated business anymore, and you don’t need to look very far at the record of steel companies in America competing in that environment to get a feeling for just how intense the business processes are to keep this public corporation alive, well, and worthwhile as an investment to the shareholders of the corporation. It is not easy. I would have said it ain’t easy, but I am sitting beside a couple of English professors, and it is not worth the risk.

It wouldn't surprise me as time goes on that some of the most important break-throughs in the education and reeducation of the workforce of this country will take place through the outreach efforts of the universities of this land.

Peel back the roof of Carpenter Technology at any moment in time, and there are about 15,000 orders working their way through those 1,100 work centers. We never had a computer in the plant until 1985.

When I came to work for Carpenter in 1962, my first paycheck was written by hand. I am not saying that with pride, but that is the point from which we started. When I graduated from the University of Cincinnati (and I understand unfortunately they are not represented here tonight; I'll talk to them about that later), I went to my first job at General Motors as a systems analyst. We were in the process of putting five plants of General Motors on a centralized computer system in 1960. In 1962, I left that environment, because I didn't like punched paper tape, programming, and all kinds of IBM cards, and I thought there had to be more to life than that and took on a job of selling for Carpenter.

I knew nothing about steel, but I felt as long as I interacted with people, and they had eyeballs and voices and minds, I could learn it, and I would enjoy it a lot better than sitting in that closet writing numbers down on a programming chart. And it worked out OK. But that first move from the General Motors environment to a company where my first paycheck was written by hand was somewhat of a culture shock to me. We have come a long way since then, and if you think about what's on the horizon for us as we stand here tonight relative to the application of that technology into this thing that we call the Internet, we are on the brink of a rather significant second change. I will talk more about that, too.

Worldwide Competition

We distribute the product that we make. We still have research and development. We talk directly to the customers. They are the ones who are designing the products for tomorrow. We need to know the material requirements that are involved. Some of these business concepts are 100 years old. We are standing on the shoulders of the businessmen of the past who helped build this corporation with some very solid business practices that are still appropriate today. What's been changing is the way our business is conducted and the way the business must be run.

So with that platform, let me talk to you about some of the issues that we deal with today. One of the big ones obviously is that we are not an American company doing business in America anymore. In 1962, 5 percent of our sales were outside the United States — only 5 percent. We were a $500-million company. We did $25 million in business outside the United States. Last year, as a billion-dollar company, we did $180 million in business outside the United States, and the most significant growth prospects for the product line of this corporation are not within the borders of this country. That's new, and that's different. What that has brought to the table is a whole raft of different business cultures, different business practices — dealing with issues of translating foreign currencies — and different time schedules.

Our mill operates twenty-four hours a day, seven days a week in most cases, but our offices are not open around the clock. How do you deal with somebody in India who is on his computer at 2:00 in the morning (U.S. time) and wants to place an order or has an inquiry for technical support? We are faced with a real dilemma on how to deal with this.

We have expatriates now for the first time in the history of the company. American youngsters who are volunteering to go to India for two years or to Europe for two years. They will go down to Mexico. They will go to Taiwan. They see it as an international opportunity and a way to expand their career opportunities with Carpenter. You try to get somebody from my generation to do that when we were twenty-five to thirty years old, and we would have laughed you right out of the room. That was not part of our agenda. I didn't want to go over there. I didn't know anybody. I didn't know how they lived. Those issues are still floating around in some heads today, but these folks find a way to make it happen. It has gotten a lot better outside the United States than it was when I was a young man. That has helped a lot.

The other issue has to do with the clock. All of the time frames of business have compressed. I am talking about the time from when we receive an order until the material is put on the machine at the customer's plant. The definition of lead time used to be from the time we got the order until we shipped it. That doesn't work anymore, because now you put the order on a ship or a truck or a boat, and the customer at the other end really doesn't care how long it takes you to get it there. He wants it there by Wednesday.

We have been pressured to shorten the time to complete a job, yet many of the processes haven't changed at all. We still buy raw material. We still buy nickel, chrome, cobalt, and molybdenum. We still put it in the furnace. We still melt it. We hot work it. We roll it. We finish it. And it finally gets out the door, but nobody wants to wait anymore. Everyone wants what they want in a short period of time — often half of what it normally takes us to do it. What that has driven into our company is an awful lot of attention on the area of process refinement — variation reduction. I don't know if you have ever heard of a concept out of Motorola called Six Sigma or not, but it works. It is intense, and it is full time for many of our employees.

Our product line sells for an average of $6,000 a ton. We lose three dollars for every pound we throw away. We can't afford to throw a lot away! So this process variation reduction effort is looking at every one of those fifteen workstations that each of our orders goes through, looking for ways to avoid waste, reduce the production time, and reduce the amount of time any order sits on the ground waiting for the next operation.

Our inventory investment, process inventory, and finished inventory is significantly less today by relationship to sales than it would have been in years past. All of this effort is going into developing a process that can compete around the globe in a compressed time frame. It is very energized and very competitive. We're competing against people in France for business in France, and we are located in Reading, Pennsylvania. It really requires some thought to figure out how you are going to compete against them just on the issue of time.

That brings me to the other thing that's changed: profit and pricing. We are in the most competitive arena that I have ever seen in the steel business in the thirty-seven years I have been with Carpenter. When I was a young salesman, we used to have price increases a couple times a month. Every time the supply costs went up or the cost of electricity went up or the cost of nickel went up or you just felt like it, the prices were increased. And we passed it along, and the customer took it. Then, he raised his price, and we dealt with the resulting inflation and the economy the best we could. But it wasn't an issue. It was expected. "When is your next price increase going to be?" I remember being asked that.

Today, we enter into three-year contracts with companies like General Electric, General Motors, Texas Instruments, Ford, Chrysler, Boeing, and we are told: "Here is a three-year contract. Here is your price, and we want a 5-percent reduction each year for the next two years." Now, that doesn't work if you want to stay in business very long. So the next statement that we usually make is: "All right, I understand the pressures that you are under, but let's look at the process that begins with our acquisition of raw materials until you do at least three operations on the products that we send to you. Let's look for ways to take cost out, so that we can develop a lower-cost process that allows Carpenter to supply you with the pricing that you need without us having to subsidize your profitability. We have had some success with that, but the pressure is immense.

We have global competitors positioned around the world now who are often owned by the government or subsidized by their local government with profit motives that are completely different from our own and an asset base that could be half ours. They often price without any regard for profitability — more for keeping their people employed. I guess I can understand that. If I were the king of a small country, I would build a concrete plant first, and I would build a steel company next. Even though I couldn't take away the output of that steel operation, I know I can ship it into the world market, and everybody's going to be happy that I have my people working. I understand the philosophy and the economics of it, but it has a real significant impact on a company like Carpenter that manufactures a full spectrum of specialty alloys — from the very simple ones to some of the most complex metallurgical combinations that you can imagine.

Some of the alloys we make are melted three times to get clean, cleaner, cleanest. They end up in applications where they simply cannot fail. We are asked in a lot of cases to take some very sophisticated alloys and compete with companies in foreign lands that have a whole different motive for being in business. It is a challenging, stimulating environment to be sure. We fundamentally, today, have most of our competition coming from companies outside the United States. That's a change folks.

In 1962, we were probably the fifth-largest specialty steel — long products — producer in the United States, and now, most of those other companies are gone or owned by foreigners. They didn't reinvest. Their product capability doesn't meet the quality requirements of the market today, and they are in deep, deep trouble — alive in a lot of cases only because nobody wants to pay for the environmental liability that would come with closing the plant. That is a lousy reason to stay in business, but it is happening all over this country, and it has an impact on the business environment in which we function.

So, that's what we make, and that's the world that we live in. We buy raw materials around the globe, and we process them into alloys of significance, and we ship them all over the globe for some of the most demanding applications you can imagine. That's what we do. Now, you understand as well as I do that the success of any enterprise is based on the collective capability of the people who make up the enterprise. I know that; you know that. I fully understand that any success that I may realize as a CEO or chairman of the board of Carpenter is going to result from the people who are doing the work for Carpenter — no question about that.

Employee Training and Development

There are two people issues that I want to talk to you about tonight. One is the skills that are necessary to play this game effectively now, and the other issue is something that I don't hear discussed very much anymore, but it has to do with the very character of the people we are going to employ.

Let me talk about the skill base first. The work environment in our plant today is team based. There are few problems that can be solved by one person or by changing any one machine. Most of the issues are multiprocess, multidepartment problems. So we put teams of people together from the disciplines that are necessary to develop the resolution for that problem. We use statistical analysis of problems. We are able to take complex problems and break them down into the simplest elements and then, when our people can't go any further, we teach them how to take risks and deal with various shades of gray, but they do this in a team-based environment.

Do you know how few people in the manufacturing environment today can function effectively in a team-based environment? Do you know how many of them feel uncomfortable talking in a group?

We have one department of people who have been working together for fifteen to twenty years — the one-liners, the ethnic jokes, the barbs, the left hooks that had flown over the years. Those people all worked together and were responsible for our success relative to the operation of their units as a part of the whole process. And they didn't like each other. We put them in a team-based meeting to talk about shortening the lead time through that unit, and they wouldn't even talk to each other. We had to go outside, get a consultant, and talk to those people and give them training about how to function in a team-based environment. That is one challenge.

Number two: The greatest intellect in the world does us very little good if the communication skills don't come along with the intelligence. You may have the best idea in the world and not be able to write it down clearly. If you are not able to present an idea on your feet, then you are limited right away by the usefulness and the contribution you are going to be able to make in the business environment today. People need to work together. They need to be able to communicate with each other, and they need to be able to function in a problem-solving environment without feeling threatened. They need to be able to raise their hand up and voice an opinion or an idea without being scared. That environment is where we are today.

The required skill base of the people we hire is much higher today than it was just ten years ago. The only way that we can compete in this global environment is to find the very best people we can find and put in their hands the very best tools that capital can provide. We have spent hundreds of millions of dollars over the last five or six years to buy the most sophisticated metal processing equipment on the face of the earth. We shopped the globe for technology. But, I am concerned.

I read the other day that in 2004, 50 percent of the workforce of General Motors will be eligible for retirement. At Carpenter, I immediately asked our human resources person what that number is for us? The answer I received was 31 percent. History shows that about half of the people who are eligible will actually choose to retire. Do the math. That's about 850 people out of our company in the next five years.

Now they are all going to have to be replaced, and the people that are not coming out of the college environment today are probably going to run those marvelous machines. Our mill is computer based and high technology. When you walk through our mill, you will be struck by the low number of people. They are in pulpits; they are on computer terminals. These are not just strong-backed folks anymore.

Now match that up against those who come out of high school and choose not to go to college, with an English equivalency level of eighth grade and lower than average math skills. Those who go on to college are some of the brightest I've ever seen, but those who don't are usually not well equipped for the workplace. We are not even training tool and die makers anymore in this country. We are not training pipefitters. We are not training electricians. The craft capability of America is really suffering right now. I don't know what these kids think they are going to do to make a living. They are not concentrating on an economically viable career path.

I worry when 850 people leave, and we try to hire folks to run those marvelous machines that allow us to be competitive around this globe. Where are we going to find them? And if we have to train them in math and English, then I am spending money that the company I am competing against in France isn't spending. We have an issue here, and that is the reason that the business community in this country is so actively engaged in education.

The labor rate in India is $1,200 a year. At Carpenter Technology in Reading, we pay about $25 to $30 an hour in wages and benefits. I don't want our people to make $1,200 a year, but they have to be able to compete against people who do. We are in a whole different environment. India is the largest democracy in the world and has one of the largest-growing middle classes on the globe. They buy stainless and other alloys, and it's going to grow, and we want to be there. There are companies in India that seek to move metal into the United States and compete against us, or they provide metal to companies in India or in Europe that make parts to compete against the customers that we sell to here in the United States.

This is not a game that is being played only competitor against competitor. It's supply chain against supply chain. We have some advantages over the competition based in India. It happens to be on the other side of the world. We have a big ocean, and there are trade barriers. Nobody wants to ship a half-empty container, so they usually want to ship in large quantities. We are positioned in this country to help people with issues of cash flow, technical service, and warehousing.

We don't seek to compete only on the basis of price. If you don't value the other things that we bring along to the party, then shame on us. There is no way for us to compete with $1,200-a-year labor. There are some politicians today who would put walls up around the United States and say, "You know we ought not get involved. NAFTA [North American Free Trade Agreement] was a bad deal. We ought not to play. All of these manufacturing jobs are leaving this country."

Well it's a fact that if labor is a major element in the cost of production of anything made, either you'd better find a way to address that with technology, or it's gone. It's going to go to Thailand or somewhere else, and if a company in Thailand doesn't do it, an American company is going to go to Thailand and do it there. That is the way it is.

If you can't address these issues with technology, then you are in deep trouble. But we need free and fair global trade. We need better people. We need better skill bases, and the people we have need to be retrained and educated in the technologies of today. We have some really good folks with great attitudes, but they need additional training. As educators, you can help us with that.

The Character Issue

Now the character issue. We have made some progress in this country, but not nearly enough. We still seem to evaluate the worth of human beings by what our eyes see and not by what our brains tell us. We are still conscious of the appearance of folks more than the character of folks. We have made some progress, but we have a long way to go. We still have some discriminatory issues that are continuing in this country that must come to an end. Part of it starts with the education process. I am under pressure as the head of a public corporation to position people from minority segments of our society into positions of responsibility, but I cannot compromise on capability. Very few inner-city youngsters choose metallurgy as a career. Not very many of them choose engineering, and when they do, they usually don't come into the steel business, and very few of them are females. These youngsters are not targeted toward the opportunities that exist in some of the manufacturing technology-oriented careers in America today.

I am not in favor at all of programs of entitlement, but I am in favor of programs of advocacy and enablement. The business community has a role to play in the kind of programs that promote our needs, that help to equip these students so they can “fly” in manufacturing careers. Underneath the glass on my desk is an anonymous saying. Though I don’t know who wrote it, I have used it very often. It says, “Come to the edge. We might fall. Come to the edge. It’s too high. Come to the edge. And they came, and he pushed, and they flew.”

We need leaders and instructors who can call people to max out the capability that they have and utilize their God-given talents so that we in the business community have access to their intellect and their character. We need people with skills, integrity, and character. Now all of those people don’t live in State College perhaps, nor near a college, but they all need the tools. And voilà, here is outreach.

I don’t know how you feel about what you do. I am not an educator. I don’t work in your environment, but I will tell you that it wouldn’t surprise me as time goes on that some of the most important breakthroughs in the education and reeducation of the workforce of this country will take place through the outreach efforts of the universities of this land. And here comes e-commerce, e-business, and the Internet — the tsunami of the Internet. Hardly anything will change because of the Internet, other than nearly everything we do.

In the past, when we had a targeted market in France, we knew the customers, the industries, and the opportunities, and we geared up to respond to them. You throw the product line of this corporation on the Internet with no borders, and now we don’t know where they are, and we don’t know what they are going to want.

Outreach and Inreach

What’s the limit of your outreach? There are those in attendance from outside the United States. Does that mean if I live in Zambia that I could take a course or get a degree from Penn State? If not today, tomorrow? From Wisconsin? From Michigan State? How is this all going to shake out? I will get a degree from where?

I’ll tell you one of the biggest issues that we have had to deal with that I think you are going to have to deal with as time goes on. I may be preaching to the choir. As we have moved our operations out from Reading, Pennsylvania, to around the globe, we have empowered people to act on behalf of Carpenter. We have decentralized. The biggest issue that we are dealing with right now is the effective strategic integration of all of those business activities so that it makes corporate enterprise sense. We don’t want twenty-five kingdoms trying to take our product out into the workplace.

From your perspective, I think, in addition to outreach, there is work to be done that I guess you could call inreach. Make sure you are plugged into your base. Make sure that the power base from which you reach out understands and embraces what you are doing and supports what you are doing and isn't threatened by what you are doing. You operate in a much different environment than I do. I don't deal with some of the issues that the educational community has to deal with, but I would sense that there are probably some people who feel very threatened by the work that you are doing and the things that you are trying to grow and the things that you are trying to deliver.

We have the same problem. Headquarters is where all the brains are, right? Well, certainly not. We are about to take the borders of our business activity and erase every one of them. This will become a borderless globe for you and for me. I believe most everything we do in this business environment will be affected by that technology. Of course, the kinds of people that we need will change again. When it comes to those who graduate from the college experience, they need to be able to be effective in the Internet environment. It's changing on a regular basis — so fast that decisions are made knowing less than we would like to know.

In the old days, we could take our time. We could analyze. We could dissect. We have all this data today coming out of this electronic environment, but the time frame in which the decision must be made doesn't give you the time to do all the homework you would like to do. You need to call the shot based on what you know, what you think, what you feel, and what your experience has provided. That's dangerous, but we need the people who can deal with that. It shouldn't scare them. They must be confident about their work. They know the right thing to do. They have character, and they have capability. That is what it is going to take.

We need to have your outreach into the communities where our operations are located and where our employees are working. We need your faculty to help our people acquire the kinds of skills they are going to need to be effective in what they do.

We need to have your outreach into the communities where our operations are located and where our employees are working. We need your faculty to help our people acquire the kinds of skills they are going to need to be effective in what they do. To me, you've got tomorrow in your hands, but you need to stay connected back to the power base. I don't mean by power anything other than resource access.

You have the opportunity to sense what the market needs. You know what the requirements of the workplace are in your local area. You are the only people, I think, who can effectively deliver that perspective back into the educational base with any kind of accuracy. I don't know how you are perceived in this university structure. Is outreach a cute thing, a trendy thing, or a real vision for tomorrow?

If you look at all the things that are going to change in the delivery of an education in this country and the way business is conducted on this globe, you'll see we are going to need a lot of help from smart people. We consult a lot with many universities in this country on technology, but we also have custom-designed MBA programs for our managers. I went to MIT. I went to Pittsburgh, and I came to Penn State for executive programs. The case studies were related to Apple Computer and Coca-Cola, not anything relative to the issues facing Carpenter.

We brought the professors from Penn State to our plant to address strategic planning, strategic marketing, strategic finance, strategic human resources, and strategic growth. The courses should be taught with your perspectives and experience, but also with an understanding of the strategic issues in this company.

We've run 160 of our managers through these courses. I don't have to call Bain and Company or First Boston or McKinsey anymore when we have a strategic issue on the table. We put our own management consultant team together right out of the management group at Carpenter, and we let them fly. We tell them what the deliverable is, and we tell them how much time they have, and we turn them loose. The group that we charged to investigate the first correct step for Carpenter in India brought us the joint venture opportunity there, and we didn't pay any consultant to get it. Our own people did the study. And do you know what? Those people got a lot smarter in the process. Now they are even better than they were.

Outreach. You need to sense what the customer needs, sense what the business issues are. What kind of people are they going to need? What kind of skills are they going to need? Help us with the issue of character. Get these people turned on to doing the right thing, so that they can be trusted, because they are going to be operating in outreach locations, not outposts, but outreach locations. We need to have the confidence that they are not going to get this company in trouble. I need to trust them. That's character. The collection of the character of the people reflects the character of the company.

I love to interface with customers all around the globe and lay the capability of Carpenter on the table along with the capability of our people. I am really proud of them, but when 850 of our people are going to retire in the next five years, I worry. So we need your help, and I am glad you are here, and I am glad you are doing what you are doing. Just please recognize the importance of what you are doing.

It is a pleasure to be with you. I hope you have these meetings on a regular basis, because not only should you be inreaching to your institutions, but you should also be networking this way — looking for the right ways, better ideas, ways to do what you do that are state-of-the-art. Everything we do should be state-of-the-art today if we are going to compete effectively — the way we think, the way we act, the way we produce, the way we run our businesses, the way we treat our people. Best in class. It is the only way outreach partnerships are going to work. It is a highly competitive, electric, pressure-filled, man-eating environment. I love it.

It's great to be with you. I hope you have a wonderful next couple of days. You have an important job to do, and I hope you understand that the business community fully appreciates what your universities bring to the table. So have a great week. Thank you very much for your attention. I appreciate it.

Robert Cardy
Chairman and Chief Executive Officer
Carpenter Technology Corporation

“University Outreach: Realizing the Promise through Vision and Accountability”

By Lou Anna Kimsey Simon
Provost and Vice President for Academic Affairs
Michigan State University


Lou Anna Kimsey Simon

As my contribution to our lively discussion about achieving the promise of the engaged institution, I want to describe briefly our experience at Michigan State University (MSU) and my perspective on the process of moving our institution toward making its commitment to the land-grant philosophy a powerful force in the coming century. I want to look at three areas: (1) the vision or definition of “engagement” that grows out of our land-grant heritage, (2) issues surrounding the shaping of the organization to fulfill that vision, and (3) considerations of how we are to define and measure our success in these endeavors.

Each institution will approach engagement somewhat differently, depending on its answer to the question “What are our roots, our values?” Institutions can be “engaged” yet very different. MSU approaches the question from the perspective of our pioneering land-grant heritage. Three constructs underpin our view of engagement. First, we must be elite without being elitist. The role of the land-grant university in 1855 was not to provide a second-class education, but to open doors to a broader spectrum of individuals and give them what today we would call a world-class education. Second, we must foster the melding of the art of knowing and being (represented by the liberal arts) with the capability of knowing and doing (represented by the emerging disciplines and professional fields of study). Such roots support our current emphasis on research as part of undergraduate education, service learning, and other forms of outreach scholarship.

Third, our land-grant heritage also involves us in broadening the range of voices that have a chance to define the problems to be addressed by the university. Our goal is to broaden the number of voices that help identify relevant problems, while ensuring we address these problems in ways that generate, or apply creatively, cutting-edge knowledge. As you know, in 1855 issues related to farms and farmers had no place at a university. Farmers had no voice. The powerful organizations we know today did not exist. Today, as we consider issues such as these — issues of children, youth, families, the environment, or land use — the university must still make special efforts to involve people who have little, if any, voice in defining the research agenda for the university. Our challenge as we go forward is directly related to how we broaden these voices, how we take responsibility through our programs so that those voices make a difference in what we do. They alone do not define what we do, because that is a two-way street. Nonetheless, we must become aware of how we are broadening the voices to be sure those voices are heard, and are important, in what we undertake.

Strengthening Outreach and Engagement

A central issue for us to think about at this point in our history remains: "If society were given the opportunity to create the research-intensive land-grant university in 2005 (which is Michigan State University's sesquicentennial), what would that institution look like?" I would encourage each of you to think about a key future benchmark for your institution, whatever that may be. Think about the question "If you were the architect of this new institution, what would you create?" I think it is important to think about these issues if you are looking at strengthening outreach and engagement at your university as an incremental step from where you are, or are trying to imagine things that are "out of the box" and different. In part, if one can do the latter, then the paths become a little bit clearer toward our becoming much more agile (and all those other organizational performance words you hear via the Kellogg Commission that people are asking universities to embody).[1]

Let me turn to some of the issues surrounding the shaping of our organization to enact this mission. The first is the issue of avoiding knowledge silos. Because so many problems are interdisciplinary ones, universities have a tendency to react by building special interdisciplinary centers. Interdisciplinary programs can be a knowledge silo just like traditional disciplines. Most of us have to deal with interdisciplinary, cross-cutting programs after they have been established as a center, an institute, or "mode." We have given the center a name, we have given it a director, an associate, graduate assistants, and space. Once you do that, it looks like a department and acts like a silo. Part of our challenge in thinking about these knowledge silos is the question of "do we need to create an organizational unit in order to have an interdisciplinary being that then turns into a competitor to a department? Are there other ways of accomplishing interdisciplinary responsiveness?" We have used the language of "virtual units," which means that they might have a director but no space — the ultimate resource for a university. They exist in virtual space and time. We have also spent a lot of time talking about matrix organizations. In our organizational contexts, outreach becomes an integrated, cross-cutting part of what we do, yet it is very hard to get department chairs, and even a provost, to think and act consistently in ways that promote both dimensions of the matrix simultaneously.

Connectedness

How do we begin to think about the connectedness that is needed to run a matrix organization and emphasize outreach, for example, in ways that assure outreach is not just another silo? What we have tried to do, and what I suggest you think about in your own context, is think about whether or not you need a separate organization for outreach. In that way, Michigan State differs from Penn State. Penn State has chosen to have a little bit more centralized organizational structure for outreach than we have. We have tried to promote outreach through matrix management, changes in overall policy, and the kind of grant incentives that you would see in other places. You need to make a choice as you think about your own institutional context, about connectedness, and what approach you want to use. That is part of the contrast between Penn State and Michigan State; we have similar goals and aspirations, similar programs, yet different organizational approaches.

This issue of connectedness is important as it relates to the community. A model with which we have tried to work with some success is to look at the question of how we can best use knowledge to affect quality of life in our communities. In the medical systems, there is scholarship called translational research: how you get ideas from the bench to the clinic with positive impacts on human health. There is also a set of models about how to sponsor and support translational research. How can we move the benefits of these models into other areas of the university and be more connected to the community? Simply put, we must avoid the temptation of recreating new models every time we are trying to foster outreach in a different cognitive area or knowledge domain. We need to reward those who work to transport models into new areas. Also, translational research does not just report research results, but synthesizes those results so that they are meaningful for a variety of clients.

Little is accomplished by simply dumping information called research reports on someone in the community. All of us do that. When someone asks what our outreach program is, we hold up documents. They say "Research Briefs: Public Policy," "Research Briefs: Environment," "Research Briefs: Education." Yet, do we take the time to work with the community to help them understand and use our expertise? How can we help them understand what is firmly known? Can we find ways to communicate information with the community so that citizens can distinguish among what we know for sure (or that if we had a hundred researchers in the room, 90 percent of them would know for sure, because in the academy there is always someone who does not agree), from something where it's 50–50 or it's just emerging as a new idea? How do you think about transmitting information to folks external to the university that allows them to know the error band? If we can do that, then we can make the information that we have much more accessible and have a greater impact.

One of the toughest challenges in promoting outreach eminates from one of the questions that people often have, which is, "What is it?"

Part of being a connected or engaged university is how we make information accessible to people who are not like us. A good threshold test is to try to make a complicated concept accessible to someone in a different discipline within the university, because we all have our jargon. To make this outreach agenda work, we must, collectively, be sure that people understand it, much in the same way a good teacher is promoting learning in the classroom. So, how do we take that spirit of promoting learning and translate it into how we work with the community? At the same time, just as in a good undergraduate class, how do we then listen to what our outreach partners have to say, so that we can create significance and meaning in our work for them (and in order for us to find the research agenda for the next step)? How do we promote listening to our outreach clients?

Part of the transformation of Extension must be developing better mechanisms for listening, not just for traditional Extension programs, but for all programs of the university. Extension agents must be the "eyes and ears" for faculty, the university's listening network, part of the translational scholarship paradigm. At the same time, I recognize that Extension must have its own programs. I also recognize that given the size of county-based funding and its potential for growth, Extension also becomes part of the community, its agent rather than the university's broker. As we have grown the entrepreneurial spirit and as Extension becomes more of an agent of the community, how does Extension also become the listener, the broker, to assist in achieving a successful university-level outreach program? Too often the "me—thee" approach makes it difficult for Extension to function as the bridge between the community and the university for all programs.

What is Outreach?

One of the toughest challenges in promoting outreach emanates from one of the questions that people often have, which is, "What is it?" We began in 1993 with a report titled "University Outreach at Michigan State University: Extending Knowledge to Serve Society." This report is available on a Web site at [http://www.msu.edu/unit/outreach/publications.html.](http://www.msu.edu/unit/outreach/publications.html)[2] One of that report's conclusions was, very simply, that outreach was scholarship for external audiences. As such, it was an integral part of teaching and research. But the report still talked about teaching, research, and outreach as if outreach was just another name for service. Part of the tension in the outreach report is that although we had talked about **Ernest Boyer's** integrative notion of scholarship, we still called it outreach.[3] This approach gave the impression that we just renamed service — teaching, research, and outreach.

What we are now trying to do is label that third category "citizenship." We would then speak of teaching, research, and citizenship. Citizenship is committee and administrative work in the institution and in disciplinary professional organizations. Citizenship also includes community service that falls outside a faculty member's research or teaching agenda. Outreach, scholarship for external audiences, is best considered as integrated with research and teaching. We need to really think about redesigning forms and procedures to reinforce that outreach is a fundamental part of either the assessment of teaching or the assessment of research. We are in the middle of that transition. You will hear distinctions in approach in the nuances of the difference in language between the integration of outreach into teaching and into research versus the integration of teaching, research, and outreach. That is a fundamental conceptual difference. It will make a difference in faculty evaluations and a wide variety of other things. As you think about the issue of what outreach is, you should not only think about the Boyer definition about what outreach, or the engaged university, is, but also which of those two paradigms (integration of the three or integration of outreach into teaching and research) will be the foundation of your approach. I believe that those two paradigms result in different outcomes organizationally.

Wharton School Model of "Perpetual Whitewater"

At MSU, we have adopted some of the Wharton School language about how to promote change.[4] In order to accomplish the outreach agenda, you have to find a framework for change within the university. Ours is built on the Wharton model of "perpetual whitewater." In this framework, instead of thinking about the world as "steady state, change, steady state," which is often how we plan, you think about the world as being in constant change. That is why the metaphor of the river is utilized. You are going through this river and always moving. You have periods of really heavy whitewater and things are bumping around, you have rocks, but you must keep going. Part of it is how you steer the kayak, the canoe, or whatever you want to use as an analogy. That concept is really important in trying to move an outreach agenda forward, because the world simply does not work as "steady state, change, steady state," particularly when you work with communities, and particularly if you go beyond a project orientation. Project orientations tend to get you in "steady state, change, steady state."

One work in process with our various administrators addresses the question of how you move out of "steady state, change, steady state" and into this "whitewater" orientation in a way that encourages you to think about those projects as connected together. You can then begin to anticipate and think about the next path, not just "do this project because someone wanted it." Clearly, not everything someone wants we can do. How do you begin to plan a course through whitewater, knowing that this tension is always going to be there? You cannot use all of your resources, like a foundation grant, right at the beginning, because if you use them all at the beginning, you have nothing for the next stage. How do you think about those issues? What organizational change process do you adopt for your institution?

This concept of change results in a lot of tension. There are unresolved tensions in doing all of this, because we are in whitewater, we are looking at directional truth, yet people are venturing out on a variety of paths. How much of that tension is creative and necessary to move the organization, and how much of it do we need to stamp out? Obviously, one answer is to think in terms of balance. Another is simply to recognize that it is possible to find connections and direction within what some people call chaos. We each have different points of tolerance. Shifting metaphors, leadership requires both being good at and appreciating improvisation, much like a good jazz musician.

Another notion about perpetual change is illustrated by a terrible analogy that is not accurate scientifically, but I'll use it anyway and attribute it to **Peter Cappelli** of the Wharton School. If you put a frog in water and keep turning up the temperature, the frog will not notice the difference between each little gradation. Eventually the frog cooks. However, if you take a frog and throw it in hot water, it jumps right out. What happens with organizational change (to work both for your advantage and for your disadvantage, if you think about trying to change an organization) is that sometimes we miss profound changes, because we are like the frog in the water with the heat being gradually turned up. We do not really notice the point at which a significant change occurs.

The discussion about distance learning is a lot like this. Those of us who have been around for a while know that people have been saying that distance learning was going to take over for a long time. We probably missed the temperature change that caused it to be a real trend. How will you think about ways to monitor those small changes out in the community that may represent trends so our outreach program really works, or for recognizing changes internal to the campus, for sensing when, in fact, you have the cultural change that you need? Such change will not register in monolithic events, contrary to the planning rhetoric with which we are all familiar, or be reflected in those five-year plans. It just does not seem to happen that way. What we have tried to do is to use the Wharton model as a way of getting us in a little bit better position to think about what we need to do to be the kind of university envisioned in the Kellogg Commission Reports.

"Directional Truth"

We have also adopted another plank of the Wharton approach, which is "directional truth." If you had come to campus over the last five years, you would have heard me saying something like, "We're all going to go to California. I do not care how you get there, as long as you don't go though Europe. You may go through a variety of routes." The university-wide vision for outreach will allow everyone to have California as a target. However, you cannot be so precise as to say that in order for us to get to California, we are all going to go through Kansas City. That will never work in the model of "perpetual whitewater." That works in "steady state, change, steady state." You cannot have very precise, intermediate benchmarks for all your individuals and units. "Directional truth" for outreach has to be something that people can apply within their units.

There is a tension in trying to have outreach institutionalized, on one hand, and to make it work in a real world, on the other. How do we articulate the "directional truth" for outreach so that we all recognize that California is the "engaged university," while acknowledging that this "directional truth" permits many paths? Every unit is going to have its own path. Some of them are going to swing through Canada, some are going to take a detour through Mexico, some people are going to plow straight ahead. But the organizational change, if you look at it from an organizational perspective, has to accommodate all of those people. My view is, "If I'm provost long enough for everybody to get to California, I can figure out how to get them to the same place in California."

"Directional truth" also is important because administrators change. All of us have our own way of talking about things; most believe it is the best way to talk about issues. Yet for sustained impact, we have to move away from our own language and benchmarks and think about "directional truth" for the organization. We become more engaged in a *radically incremental way* — incremental because we exist with the people we have. We are not going to be able to trade them for five "draft choices" later. In a sense, we have to be really bold about where we are going, allow enough space for people to get there in a variety of ways, and then also recognize we play with the team we have. This means we still have some traditional commitments, like undergraduates or research contracts or those old programs if you are in Extension, that you have to deal with, and you have to work your way out of them. I stress radical incrementalism. Thus, each of us needs to keep in mind "perpetual whitewater," even if you don't like the water, and what is going to be your "directional truth." Your "directional truth" has to be big enough to last for a while in order to change the organization, as opposed to simply making the administrator look pretty good for the time that he or she is there. You need to think about your institution, grounded in roots, driven by aspirations, along with how to promote radical incrementalism.

Fostering Organizational Change

Let me suggest another metaphor: fostering organizational change is like completing a jigsaw puzzle. One works on a lot of parts of the puzzle simultaneously. If you think about this from a central vantage point, or as a dean, or as a program director, there are lots of things that happen — and they do not happen in sequential order. So we have to move out of linear thinking and think about this change process as being a big puzzle where you keep putting down pieces. Ideally you would have a border, because the border represents the "directional truth," but some pieces of the border may be missing. We should not be deterred because some pieces of the border are missing. This is a dynamic world of "perpetual whitewater." In a dynamic, perpetual whitewater world, we are likely to have many pieces of the border missing, although having the four corners would be comforting. Then we begin to put pieces in place. The pieces we begin to put in place include things called policies. Some of them do not come under the title "outreach."

What you need to think about is an array of policies that do not necessarily have outreach as their focus, but affect the way outreach is conducted. For us, what we have thought about — and what we have done first — is look at a policy on faculty assignment. Many of you are in institutions where faculty belong to very narrow units. We have a philosophy that tenure resides in the university, not in a department. Even when you get rid of a program, it is hard to get rid of people, so why bother with that approach? With tenure in the university, you can move people around to different departments and different approaches. We started with the concept of how we begin to reassign people; it never had outreach as its policy objective. We revised the reappointment, promotion, and tenure policy after the outreach report using simply Boyer's language: the scholarship of engagement.[5] In doing that, we did not have to make outreach the driving issue; quality was the focus. We must work with each faculty member over his or her career, trying to worry about a tenure-system faculty being able to perform both teaching and research with an outreach dimension. How do you think about this process? If you load all of these changes on outreach, they will never go, nor will you have the coherent whole in the picture.

Assessing Quality

The next piece of the puzzle to promote organizational change was for us to find a way to talk about quality, because quality is what we are about. Without the vehicle to assess quality, outreach is just hollow rhetoric. No unit is going to deal with expanding outreach if you do not have a paradigm for assessing quality. No matter how much you say that you are going to stress outreach in the re-appointment, promotion, and tenure policy, it will not translate into action at the department level unless a vehicle for knowing what quality looks like exists. In the outreach dimension, there are very few vehicles for assessing quality. Customer satisfaction surveys, which are the equivalent of SIRS forms, are not sufficient. That is not enough if you believe that outreach is scholarship. It is more than customer satisfaction. Under the traditional faculty evaluations approach, outreach will not be judged as being anything of value and it will be quickly extinguished unless you pay for it. That is not cultural change, and most universities do not have enough money to pay on a piecemeal basis for engagement.

How do you get people to do outreach on their own? Part of the answer is giving them the tools to determine what constitutes quality in outreach. In the MSU reappointment, promotion, and tenure material, we reference "Points of Distinction"[5] and have attached a copy for the last couple years for the use of every faculty member. This paradigm also works for unit evaluations. Therefore it addresses, in part, the question of how you look at individuals versus units. The value of this approach is it can do both. We did not want to send the message that what faculty members are doing and what units are doing should be evaluated differently. The way we tried to avoid sending a mixed message was to have the same document apply to quality assessment for both units and individuals. Mixed messages are very hard to deal with when you are asking faculty members to do something they have not done before, especially work that is not nationally rewarded by the professional societies. So how do you figure out a way of doing that?

We picked the approach represented by "Points of Distinction." You can read about it by going to our Web site. One of the things that we wanted to do was to be sure that outreach measures were a part of the form that goes to every department for collecting the material on which a faculty member is evaluated. For example, under the line that has instruction on it, there is a blank that says: virtual courses, how many you did, what the enrollments were, and a blank that talks about off-campus courses. Under research, there are blanks for collaborative research in communities, for translational work. What we've asked folks to do, and what they are in the process of doing, is trying to figure out ways to fill in those blanks.

There is a tension in trying to have outreach institutionalized, on one hand, and to make it work in a real world, on the other.

A word about defining and measuring an institution's success in becoming an engaged institution: How do faculty, units, and institutions get credit for their activities? That is part of what the outcome indicators are designed to do. Let me give you the "sound byte" for the conference presented by my colleagues, including **Bob Church** and **Lorilee Sandmann.** When you are doing research, you get credit for getting money from foundation and government grants. When you are a dean, you get credit for a donation from a company. For outreach, one of the challenges is to get credit for all of the in-kind contributions that people in the community do for you to make a project succeed. Because they are not a corporation, they do not care about the tax benefit and they do not bother to count. But if we counted the community contributions, equivalent to grants and donations, how would a unit's profile of outside support look? They have acquired resources (social capital) for the university to do its programs, just like a research grant or a foundation grant. How do you begin to think about different metrics that parallel some of the traditional measures? I believe you should not, then, make outreach, however you define it, a separate issue with its own metrics. With the measures like dollars for these in-kind contributions, it becomes valuable in the currency of the university. How do you use citation measures to assess papers and other things that must result from outreach if it qualifies as scholarship? Instead of thinking about measures for outreach that are different, how do we think about measures that fit our culture and apply to outreach?

Sustainability of Collaborative Relationships

Sustainability of a collaborative relationship is often seen as a measure of success. But conversations about sustainability are often tension-filled. There are really three steps in a collaboration: (1) building trust in and among the partners, (2) designing and implementing one or more projects, and (3) turning the project over to the community while the university faculty move on to other work. How do we move from one stage to another? Personally, I think a foundation should put money in the middle stage. I know that goes counter to tradition. I think we should invest some of our own venture capital with our community partners to get buy-in at the beginning and slot foundation money in the middle to really move that project through, so we know whether we have some results, and then build back the buy-in at the end of the project. Right now, we are having a hard time with the middle stage. We never seem to be able to document enough impact, because many of these problems are long-term.

Given that we are not in the business of sustaining collaborations forever, how does the university get out of projects gracefully? When we do something really well in the community, our partners want us to stay. Success presents a problem, because our faculty members want to move on to other areas of inquiry. Their passions are not limited to a single project. They are invested in creating new things. How do we think about sustainability? If we can begin to talk about sustainability with our partners in a reasonable way, we have a chance of resolving some of these inherent tensions. So at the beginning of a project, we need to talk about and think of an exit strategy. Too many outreach projects and activities end up in divorce; both parties are unhappy. The faculty member did not get what he or she wanted out of the project, because the community did not do its part. The community says, “You did not do what you promised; for example, my problem of underachieving children is still here.” This happens, in part, because we oversold and in part because we were so good in working with our partners that they expected us to work a miracle. At the start of the project, it is important to think about how are you going to end it. How do we deal with the question of sustainability? You need to think about that in all of these models, and there are some comments in “Points of Distinction” to help you do that.

National Rankings for Graduate Programs

Another topic that we need to examine is our own competitiveness. We are now considering, as many of you are, the question of the national rankings for our graduate programs. National rankings attend to things like research dollars and citations. Faculty know that time on outreach projects often does not translate in the same level of research dollars and citations. We cannot take the pressure off of that issue by letting individual faculty members say, “Don’t worry,” rather we need to address the system in which we compete and are telling each other that we are better than one another. If we permit the system among the universities that like to be highly ranked to continue as it is, seeking cultural change to support engagement is an uphill battle. The rankings based on traditional measures and institutional success are too strongly coupled. Foundations, funding agencies, and donors look at rankings. Outside of your own alumni, people may not want to invest in your institution unless it is a “success,” as evidenced in your ranking. How do you document that your institution is a success, a terrific investment opportunity? You use your rankings. I do the same thing; it is a shorthand way of saying, “We’re good; we’re better than *x*.” Are we prepared to take a radical step that many believe would promote engagement?

Are we prepared, collectively as an industry, to really take a step by saying, “You know a distinction between 3.7 and 3.9 on any measure is probably not meaningful, both scores can be reflections of a great institution”? If we are not prepared to take that step, then all of these issues about an institution becoming engaged become moot, because the evidence probably does not give any one institution a competitive edge. Our community partners and the underserved rarely are asked to fill out a reputational survey.

Often when a new president arrives, he or she will say, in his or her strategic plan, “It is my commitment to you as a faculty, to you as the alumni, to move our rankings up.” How many strategic plans have you read that include such promises? Only until we talk about impact, not rankings, can we realize the promise of the university society would have created today. Unless we focus on impact, not rankings, the whitewater may wash us over the falls.

My ending appeal takes the form of a question. If we really believe that organizational change and transformation need to occur, how are we prepared, together, as competitors within Extension or within our various areas, to de-escalate the competition and increase not just rhetoric, but action, to demonstrate that we are working for the common good of society, and some distinctions of the traditional scale of relative value will not tell the whole story in the twenty-first century?

Lou Anna Kimsey Simon
Provost and Vice President for Academic Affairs
Michigan State University

Notes

1. National Association of State Universities and Land-Grant Colleges (NASULGC). 1999. *Returning to Our Roots: The Engaged Institution*. Washington, D.C.: Kellogg Commission on the Future of State and Land-Grant Universities.
2. Provost's Committee on University Outreach. 1993. "University Outreach at Michigan State University: Extending Knowledge to Serve Society."
3. Boyer, Ernest. *Scholarship Reconsidered: Priorities of the Professoriate.* Princeton, N.J.: The Carnegie Foundation for the Advancement of Teaching.
4. Cappelli, Peter. The Wharton School. "Wharton/IRHE Program for the Knight Collaborative." October, 1998.
5. Vice Provost for University Outreach. 1996. "Points of Distinction: A Guidebook for Planning and Evaluating Quality Outreach." East Lansing: Michigan State University.

This paper is based on my Plenary Address at Penn State. It was prepared with the assistance of Robert Church, Catherine Burns, and Martha Hesse.

National Panelists Discuss Recruiting, Supporting, and Rewarding Faculty

By Celena E. Kusch
Staff Writer
Outreach Communications
Penn State University


Alan Knox


Lorilee Sandmann


Michael Tate


Alan Knox

In a panel response to an address by **Lou Anna Kimsey Simon,** provost of Michigan State University, four faculty members and administrators from across the nation discussed the logistics of recruiting, supporting, and rewarding faculty as a means to fulfill what Simon calls the "promise" of university outreach.

Panelists included **Michael Tate,** associate dean of the College of Agriculture and Home Economics and associate director of Cooperative Extension at Washington State University; **Gene Younts,** vice president for public service and outreach and associate provost at the University of Georgia; **Alan Knox,** professor of education at the University of Wisconsin–Madison; and **Lorilee Sandmann,** vice provost for institutional effectiveness and strategic partnerships at Cleveland State University.

During her address, Lorilee Sandmann captured the challenge facing all faculty and administrators committed to putting new models of outreach into practice. "Many of us have lived our lives in the realm of the scholarship of engagement, and while we find it appealing conceptually, it is operationalizing it that makes it less tangible for faculty rewards," she said.

In offering the best practices of their institutions to the outreach dialogue, all four panelists raised serious questions for faculty, administrators, and departments in determining the next steps to take in pursuing the vision of the engaged institution.

To meet this goal, **Gene Younts** stressed the importance of recognizing outreach "on an equal footing" with teaching and research. "At the University of Georgia," Younts said, "we have come very close to achieving that equality, and I think it's because of the administrative structure." He serves as vice president for public service and outreach and stresses that "it is extremely important to have this kind of high-level administrative position on campus. We must uphold faculty efforts by having an administrative structure that allows support to take place in a very serious way."

Describing his institution's best practices, Younts spoke about the value of his own position within the university, saying, "As vice president, I serve as the chief academic officer for public service and outreach. The thing that makes this important is that I am a member of the cabinet; I'm a member of the budget committees; I am involved in appointing all the faculty appointment and promotion committees, and I serve on the appeals committee for promotion and appointments. I have a seat at the top of the university administration, so there is someone there to speak for public service and outreach at every turn."

As a result of that voice, Younts argues, there has been greater integration of outreach throughout the university, including the establishment of a public service director for every college and school, growth in recruiting and support for outreach activities, and the development of faculty outreach awards to offer significant incentives for faculty.

For **Michael Tate** at Washington State University, however, supporting the outreach project did not come through the appointment of an outreach administrator, but through a grassroots-level integration of all outreach faculty within the university.

Tate pointed out that at many institutions across the country, Extension agents in the counties are considered staff. About ten years ago at Washington State, he explained, the Extension staff became faculty. In the process, a number of policy changes occurred, including changes in practices for appraising faculty not only within Cooperative Extension, but also throughout the university. As a result, he added, issues concerning the impact made on communities and the contribution made to extending knowledge across the state became part of the criteria for evaluating all faculty.

According to Tate, another significant ramification of this change is that Extension faculty are now part of the Faculty Senate and participate in shaping the policies that govern hiring, recruiting, and rewarding faculty across the university.

Since Extension faculty entered the Senate, outreach has become integral to every university process affecting faculty. Tate offered an example from the hiring process, saying, "Selection committees not only for county faculty but also for departmental faculty include external stakeholders who are involved in creating the ownership that is necessary to connect faculty and communities. Those stakeholders participate in hiring all faculty positions within the College of Agriculture and Home Economics and half of the faculty positions in other colleges throughout the university."

Despite these innovative outreach practices, Tate continued, "Like many institutions, Washington State has a lot of work yet to do in terms of realizing the dreams and vision that many of us have in the areas of engagement and access. Public policy determines who we are and what we do. Our legislature and our governor determines whether we are in fact seen as a university with a broad range of outreach programs or if we are simply a teaching institution. We are working to fulfill that public policy, so that we can truly become the kind of outreach university that I think we all want to be."

We're not talking about a renamed category of service, nor using outreach as a euphemism for community-based research, applied research, or participatory-action research.

Recognizing the importance of faculty endorsement if this vision is to be fulfilled, Sandmann's address stressed the policies related to rewarding faculty who participated in outreach. She is co-directing a national Kellogg-funded project on peer review and documentation of public service and outreach or engagement. Throughout her address, she offered the words of faculty involved in the project to elaborate on "a better understanding of this new type of integrated scholarship."

"We're not talking about a renamed category of service," Sandmann added, "nor using outreach as a euphemism for community-based research, applied research, or participatory-action research. Nor are we talking just about distance education or off-campus academic outreach, technical assistance, continuing professional education, or any other single strategy. The definition of the scholarship of engagement is emerging as knowledge and its generation, synthesis, transmission, and application pursuit in a relevant interdisciplinary, integrated-across-mission approach."

At the same time, Sandmann pointed out, those calls for defining the "scholarship of engagement as a unique type of scholarship" do not yet offer strategies to embed those activities in a traditional review process. "What we found in the faculty who are participating in the Kellogg project is that people are integrating outreach across the mission functions." In that context, she stressed that university documentation policies do a "disservice" to faculty in making them "aggregate it or categorize it as teaching, research, or service."

Sandmann offered the example of **David Cooper**, a Michigan State University professor in American thought and history, who works with students in communities and writing. Cooper lamented that because he couldn't fit his work into any documentation categories, he was deprived of really coming to know it and present it in a scholarly way, and he was depriving his departmental colleagues and his discipline from coming to know that work as well, Sandmann explained.

This stress on the scholarly function of outreach activities was fundamental to developing effective documentation processes. Sandmann quoted her colleague **Pennie Foster–Fishman,** a Michigan State University professor of psychology, who believes that "scholarship in outreach is sometimes hidden and must be uncovered through critical reflection and documentation." Sandmann argued that reforming the current focus on rigid categories for documentation can improve scholarship across all three missions of teaching, research, and service or citizenship.

"We found that successful engagement requires a scholarly basis and a driving intellectual question behind the outreach activity. Proper documentation practices must emphasize that intellectual question in order to promote the value of engagement in academic institutions by making these activities visible and our standards open for the public to see and to view in a form consistent with other types of scholarly work," Sandmann added.

The Kellogg project under Sandmann and **Amy Driscoll's** leadership is developing specific documentation practices that adequately document outreach, are subjected to peer review, and can be assessed by a set of consistent standards that can help reviewers nationally measure the relative value and impact of different scholarly activities. New documentation practices could give reviewers a means to compare a journal article to an outreach activity that changes the habits of 500 consumers, Sandmann proposed.

Despite the promise of such documentation policies and revisions of the definition of scholarship, **Alan Knox** offered an important caveat to the success of these policies if promotion and tenure committees do not value outreach in promotion practice.

“As **President Spanier** indicated,” Knox remarked, “if you’re trying to place outreach within the mainstream of the institution and a part of every faculty member’s job, then promotion and tenure is going to be a key point at which the rewards occur.”

In his address, Knox presented his findings from a study of promotion and tenure. This study examined the responses of reviewers faced with documentation that included outreach as well as more traditional forms of scholarship to determine “what happens to an individual faculty member who has been working along at outreach activities as an assistant professor and is now facing that ‘up or out’ decision in the promotion and tenure process,” Knox said.

This study of the role of outreach in tenure and promotion was based on a definition of outreach as one form of research, teaching, and service or citizenship, but Knox found that reviewers did not consistently know how to interpret that form of scholarship.

“Outreach forms of scholarship have to do with instances in which there are partnerships outside of the institution,” Knox continued. He stressed the role of outreach scholarship as being more than a one-way street, but instead combining it with inreach, “where there is a partnership with other people who are helping to decide what is to be studied, what are the findings as well as the implications for them out there. As a result, outreach forms of scholarship can look very different from traditional forms of scholarship designed to share findings with other scholars and researchers.”

The study explored the criteria being used by the people who are reviewing promotion and tenure portfolios and striving to interpret new forms of scholarship. In this process, his study found that most reviewers accept outreach teaching and research as important components of what they expect faculty to do. “Nonetheless,” Knox continued, “some reviewers were less accepting when outreach activities were not accompanied by significant evidence of the traditional forms of research and teaching they relied on in the past to judge quality.”

Reviewers also stressed the importance of maintaining balance between research and teaching and service, without emphasizing any one mission over the others. According to Knox, the solution to the balance question lies in integrating outreach-based scholarly work across the missions “in such a way that students are involved in learning from it, external audiences are being well served, faculty are learning from the process, and the work enriches the faculty’s own scholarship, and students who are engaged in research and scholarly activities are contributing to the scholarly process as well."

Despite these promising signs for faculty engaged in outreach, the study pointed out a gap between the reviewers' explicit and implicit expectations. Some reviewers, Knox found, did not consider position statements that included language about engagement and outreach; instead, they focused on their own ability to determine faculty responsibilities based on traditional values. At the same time, however, other reviewers participating in the study from the same institution took the administrative statements very seriously. This gap between administrative policy and department practice, Knox pointed out, poses a continuing challenge to administrators and faculty who support a new view of outreach.

Like Knox' conclusions, the practices and findings of all four panelists demonstrated that outreach is increasingly being viewed as an accepted and important part of faculty responsibilities; however, for outreach to become part of the mainstream of academic life, institutions will have to make a commitment to providing significant leadership in shaping policies, eliciting support for policy implementation, and "operationalizing" the scholarship of engagement.

Michael Tate
Associate Dean, College of Agriculture and Home Economics
Associate Director, Cooperative Extension
Washington State University

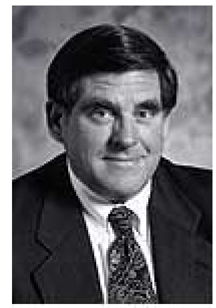
Gene Younts
Vice President for Public Service and Outreach and Associate Provost
University of Georgia

Alan Knox
Professor of Education
University of Wisconsin–Madison

Lorilee Sandmann
Vice Provost for Institutional Effectiveness and Strategic Partnerships
Cleveland State University

“The Role of Information Technology in Defining the Future of the Outreach University”

By David B. Liroff
Vice President and Chief Technology Officer
WGBH Educational Foundation
Boston, Massachusetts


David B. Liroff

Good afternoon. I’m going to talk this afternoon about the role of information technology in defining the future of the outreach university. But in order to do that, I’m going to talk about:

- Our changing concepts of distance, geography, and time.
- The accelerating rate of change.
- What we know about the future.
- The Strategic Inflection Point.
- Some ways in which we might respond to the changing environment: Who’s watching out for the public interest?

But I begin with two caveats: The first is that those who say they know how the transition to digital technology will come out don’t know what they’re talking about, and that includes me. So caveat emptor. The second is that three months from now, these will be “the old days,” technologically speaking.

Changing Concepts of Distance and Time

Let me tell you, we are moving ever faster.

My mother was born in New York City in 1910, and she told us that when she grew up, the house was lit by gaslight, and they cooked on a coal stove in the kitchen. She later went on to become one of the first female graduates of Brooklyn Law School in 1932 and graduated right in the heart of the depression. But, flash forward to 1970 ... I’m living in Chicago. She’s living in New York, and she comes out to visit me by train. I go down to the train station in Chicago to pick her up seventeen hours later. The train was on time, and I said, “You know, Mom, you could have taken the plane. It would have taken less than three hours. And she said, “It *should* take seventeen hours to get from New York to Chicago.”

Now you can compare that to my daughter Brooke, a child of the computer generation. When she was in sixth grade she became good friends with the daughter of a Swedish physician who was doing research work in the Boston medical area. They were here for a year. The girls became friends at school, but then the family went home to Sweden. Brooke and Cecelia stayed in touch with each other. They would call each other every few weeks, and the following summer, she got an invitation to visit the family in Sweden. And I said, “Boy, this is really exciting.” We made all the preparations, and I said, “Let’s see if we can find Sweden on the map.” And she said, “Wait a second, you are going to take me to the airport. I get on the plane. I stay on the plane for six hours. I get off the plane, and Cecelia and her family will be there to meet me. Why does it matter where Sweden is on the map?”

I have to say I’m a little embarrassed to tell you that story, because I come from the station that produces “Where in the World is Carmen San Diego?” So Brooke may have been among the first to discover cyberspace ... and its true meaning.
But given these two points of view, the question for us is how do we define a community these days? — as geography becomes less and less the definer of space and to some extent of time.

What is a “Community”?

There are geographic communities — they’re here to stay — people will always live someplace. And there are communities of interest which, owing to information technology, are no longer defined solely by geography.

We shouldn’t talk about “engagement” without observing that we have obligations — and opportunities — to serve both geographic communities and communities of interest, regardless of how widely dispersed around the globe their members may be. But we must understand the extent to which our definition of “community” has been shaped by our experiences growing up.

To paraphrase **Marshall McLuhan:** We are speeding into the future at ninety miles per hour with our eyes firmly fixed on the rearview mirror.

And then there’s the issue of how we deal with time and the rate at which things change. In *Future Shock,* **Alvin Toffler** identified a phenomenon which he called “durational expectancy.”

When we were kids, if Dad or Mom went off to work in the morning, we had a sense of how long it would be before we’d see them again at the end of the day. And we learned that if you dropped a letter in the mail, it would take two or three days to reach its destination.

As we grew up, all of us became acclimated to a certain rhythm in our professional and personal lives — things took a predictable amount of time, and when they changed, they changed at a predictable rate. But that’s no longer the case. As **Dr. [Lou Anna Kimsey] Simon** observed this morning, borrowing from Wharton, it’s helpful to think of ourselves as being in a state of “perpetual whitewater.”

The Accelerating Rate of Change

Nicholas Negroponte of the MIT Media Lab asserts that these days the rate of change is accelerating exponentially. He uses as an example the story of the kid who gets a job offer to work for a month. The deal is this: He'll get only a penny for the first day of work, but his pay will be doubled each day after that. Should he take the offer?

On Day One he'd make one penny; and Day Two it would be doubled to two cents, then four cents, then eight, and so on, until by the seventh day, he would be paid sixty-four cents for that day's work. Doesn't sound very promising. But, by Day 22, he'd be making almost $21,000/day, and by the end of the fourth week — twenty-eight days later — he'd be up to more than $1.3 million a day. Quite respectable. But if there are thirty-one days in the month, on those last three days he'd be earning $2.7 million, then $5.4 million, and finally almost $11 million dollars on Day 31. That's the impact of an exponential rate of change. And Negroponte argues that we're someplace in those last three days on the road to the digital transition. Talk about perpetual whitewater!

One corporate executive quipped that the major problem these days is that the average time between decisions is longer than the average time between surprises.

Look at the impact on planning cycles. Not long ago, I was given a tour of AT&T;'s New England switching facility. The engineer in charge told me that when he joined the company in the early seventies, they worked from a ten-year facilities construction schedule. He said that even eight years into the ten-year plan, you could set your watch by it. Now, he told me, they work in eighteen-month cycles, which they review every four weeks, and it's not uncommon to pull the plug on a project before it's completed and head off in a new direction. The plan, he said, is "soft as a grape."

With things changing so quickly, it's increasingly difficult for us to get our bearings, to know what to do next.

The Strategic Inflection Point

Intel Chairman **Andy Grove** writes about what he calls "The Strategic Inflection Point" in the life cycle of an industry. That's the point in time when the balance of forces in the marketplace shifts from the old way of doing business to the new. Before this inflection point, almost everything is done the old way. After this "inflection point," everything increasingly becomes more like the new. It is a point where the marketplace environment has subtly but profoundly changed, and it will never change back again.

Organizations which are successful change their way of doing business in response to the new realities. Those which don't change don't survive. If Grove is correct — to borrow again from Dr. Simon this morning, like the frog in the beaker — if we don't change, we're cooked.

Andy Grove says that in a few years there won't be any Internet companies — every company will either be on the Internet or it won't exist. And that certainly was the implication of **Bob Cardy's** remarks last night.

For those of us in education and information technology, we are passing through that inflection point right now — nothing will be the same again. We're all noticing that fewer of the old rules apply, and the new rules are being made up as we go along. But I fear that many of us may look back ten years from now and wonder: What could we have been thinking back in 1999? Why didn't we see what was going on and respond? Some of us are frozen in the headlights of technological change.

What makes us think that we are immune from these forces? Could it be that unlike Bob Cardy's specialty metals business — where marketplace forces and his company's responses to them are monitored throughout each and every day — even hourly — we're still running on "university time" — a legacy of our past which could be our undoing as we move into the future.

What We Do Know about the Future

Yet despite all of this uncertainty, there is much that we do know about the future and how it will fundamentally change how we go about our business:

- The number, speed, and capacity of networks and distribution channels moving audio, video, and multimedia data will continue to increase. We can see it happening every day by cable, phone line, satellite, wireless, and soon by digital terrestrial broadcasting. If you think that video on the Internet will never be more than the hurky-jerky pictures we see today, you should know that four weeks ago — on September 9 [1999] — the first high-definition television signals were sent on Internet 2 from Stanford University to Washington State University. It won't be in our living rooms tomorrow, but you can see which way the technology is heading.

The chief technology officer at Cisco Systems refers to this as "the milk-and-cookies" phenomenon.

- The cost of digital processing and storage will continue to plummet. Increasing amounts of data will be manipulated both on the sending and receiving end, enabling users to access information on demand, wherever they may be, and determine the form in which the information will be displayed and its level of technical quality.

Watch the consumer electronics ads in the next few weeks leading up to Christmas for two devices — one is called ReplayTV, the other TiVo — which, among other things, will allow you to "pause" a live television program, leave the room for a half-hour or more and come back and pick up the program where you left it. They'll cost about $400. You can also create your own instant replays — as many as you like — without missing a moment of the big game.

These may seem like just gadgets for the early adopters, but there's a more profound point to be made here. These are multigigabyte computer disk drives housed in a VCR-like box which sits on top of your TV set. The cost of computer storage has plummeted, and it will drop further. Soon, millions of consumers will be able to afford to have video servers sitting on top of the TV set in the family room. In addition to being used to create customized lineups of TV programs, they will of course be used to facilitate e-commerce and transactions. But the same technology — soon to be incorporated into cable and satellite set-top boxes — has enormous potential for educational applications as well.

- There's no need to wait for every home to have a computer or a digital television set. "Good-enough technologies," like DVD players, WebTV, and the latest generation of video games, are bringing interactive media and access to the Internet to millions of homes which don't own computers but own one or more of the 250 million analog TV sets in the United States. Twenty-five million new analog sets are sold every year, and the price continues to drop, as does the price of DVD players, which will be available at less than $200 for this Christmas shopping season. If you don't already own one, you owe it to yourself to test drive a DVD player and to assess this new medium's potential for advancing our mission.

- We know that kids today are growing up expecting interactivity and control of their media experiences and that media use habits are changing in fundamental ways. Two-year-olds are using computers. Kids and adults are surfing the Web and watching TV at the same time. Web surfing is displacing TV viewing in many households. Many kids today can't imagine living without computers and access to the Web, just as my son, now entering college, can't imagine how my wife and I lived without a microwave oven.

- Wireless transmission of data will increase. As Nicholas Negroponte predicted a number of years ago, wired media, like telephones, are becoming wireless, while those which were wireless, like radio and television, are becoming wired. In areas of the world where they're just now building telecommunications infrastructure, the wired phase is being skipped over entirely, and they're moving directly into wireless and satellite technologies. Welcome to McLuhan's "global village." How did he know?

- Distribution is becoming increasingly global, aided and abetted by increasing worldwide consolidation in the communications industry.

- We may be approaching the end of the era of mass communications, at least as it has traditionally been defined: Same message to all, with members of the audience anonymous to the communicator and to each other.

- We appear to be entering the era that I've come to call "amassed communication," in which the content of communications is customized to meet individual needs and preferences; the individual is "known" to the communicator

— at least in the database sense — and with increasing frequency, the individual interacts with others in the audience. Five years ago, who knew what a “chat room” was? I don’t mean to gloss over the privacy issues here, but will observe simply that my definition of “junk mail” is direct mail in which I have no interest.

- *Amazon.com* founder **Jeff Bezos** is said to have referred to *Amazon.com* as a “store for one.” I do like the way I’m greeted when I log onto *Amazon.com:* “Hello, David Liroff. We think you’ll like these items.” And when I order a book or a DVD, it sometimes seems as if it arrives within hours, as if the truck was parked around the corner just waiting for me to submit my “one click” order.

- The Internet is becoming a hybrid medium, consistent with Marshall McLuhan’s observation that the content of the new medium is the old media. In the early days, the Internet was print, television was radio with pictures, radio was vaudeville, and so it goes.

Imagine the Internet as a continuum which runs from text to still images to audio to moving images to high-definition virtual reality with surround sound. Where does print end and audio begin? Where does audio end and video begin?

- You may recall a cartoon in *The New Yorker* which pictured a dog standing up on its hind legs, peering into a computer monitor, with its front legs on the keyboard. The caption read: “On the Internet, no one knows you’re a dog.” And indeed, the threshold to entry to worldwide communications has all but disappeared.

- And we’re all familiar with the growing phenomenon of “disintermediation“ in which the traditional retail middleman — the bookstore, travel agent, the bricks-and-mortar bank, the record store and record company, the car dealership — is cut out of the equation, and the consumer deals directly with the supplier. For business-to-business transactions, the Internet is changing the marketplace even more radically, as Bob Cardy told us last night.

What makes us think that we in outreach are immune from any of these tectonic shifts in the way in which the world will be reorganized economically, politically, socially?

If all of this is true, what should we be doing?

- The first thing is to recognize that while these developments may threaten our traditional ways of doing business, they also present significant new opportunities to pursue our missions. One of the fundamental questions we must ask ourselves is what value we add in the process of delivering our services. Do we facilitate the process and increase its effectiveness, or do we just add unnecessary overhead and little additional value?

- You may have seen the ads for *WingspanBank.com*, the new on-line bank whose motto is “If your bank could start over, this is what it would be.” Just as Dr.

Simon challenged us this morning to think about how we would reshape our enterprises for the upcoming sesquicentennials in 2005, if we could leave our personal and institutional baggage behind us, how would we go about doing our business?

- Look for an article in the September 6 [1999] issue of *Fortune* titled "Internet Defense Strategy: Cannibalize Yourself." The subhead reads: "Call it survival by suicide ... Yes, it hurts at first. But, it sure beats extinction." The essence of the piece is that organizations attempting to protect existing ways of doing business easily fall prey to new startups who have no obligation to honor past practices and, in fact, succeed by ignoring them. The choice of the established players, some analysts believe, is to cannibalize themselves before someone else does it to them.

(It turns out that *WingspanBank.com* was created by BankOne, a bricks-and-mortar Chicago bank, and was given complete license to compete with the mother ship.)

- Don't allow the rate of change and uncertainties about the future to freeze you into inaction or to get locked into plans which are obsolete as soon as they come out of the printer. I've become an advocate for a planning technique called "scenario planning," which compels you to envision several different ways in which the future may develop and to plan accordingly. Unlike most planning processes, which require that we make a single set of assumptions about the future — and win over those whose views differ from our own — scenario planning encourages participants to define alternative plausible futures and to identify the critical driving factors which may move events in any of several directions. As you would expect, the models must be revisited frequently, because none of them is fixed in time. I recommend a book titled *The Art of the Long View* by **Peter Schwartz,** who invented the technique. (I got it from *Amazon.com*.)

- Stay as close as you can to your constituents, particularly the kids, to better understand how their needs and expectations are changing and how you can best serve their needs. At WGBH, I'm a firm believer in using focus groups to stay in touch with our viewers and listeners, even though one of my colleagues reminds me that "the plural of anecdote is not data." At the very least, focus groups can suggest the basis for more formalized, statistically valid research.

And since virtually everything we do involves communications in one form or another, every opportunity to generate feedback improves our probability of success the next time out.

- As the population of our country becomes more culturally diverse, it is essential that we recognize and understand the differences in the ways people learn and communicate. There is no more powerful argument for diversity in our own workforce than the need to understand how those we're trying to serve respond to our efforts.

- If you're sufficiently flexible, you can use feedback to monitor how your efforts are being received while they're still under way, as is being done at this conference. The challenge, of course, is to design a process which can respond flexibly to ongoing feedback.
- In Boston, I have principal responsibility for the spending of millions of dollars on the rollout of digital television. Since the trade magazines and syndicated research are notoriously inaccurate, I need to know how the folks out there are feeling about the coming of DTV. I've spent more than a few weekends in consumer electronics stores, eavesdropping on the conversations between customers and sales people about the digital TV sets which are going on the market. And I'll continue to do so. (Don't throw out that analog set just yet.)

Who's Watching Out for the Public Interest?

Yesterday, **Anne Petersen** of the Kellogg Foundation remarked on the remarkable foresight of those who during **Abraham Lincoln's** administration came up with the concept of the land-grant college. Dr. Simon referred to the fundamental precepts of land-grant colleges this morning. The same spirit later informed the set-aside of radio and television channels for noncommercial educational broadcasting.

I would be remiss if I didn't note that with few exceptions, every U.S. college and university in this room lies within reach of a public television station — many of them, as here at Penn State, right on campus, sometimes even in the same division of the university as outreach. Over the next three years, every one of these stations will be putting a digital transmitter on the air. Every one of these new digital stations will have the capacity to originate four or more program services simultaneously and to broadcast multimedia data to every home in the region.

These stations will be looking for partners to develop applications for these new channels. You should knock on their door, if they don't come calling on you first. Those of us in public broadcasting — and those of you in university outreach — could and should make beautiful music together for the benefit of our communities.

These days, literally billions of dollars are being invested by for-profit companies in building out the global telecommunications infrastructure. We have to know that when those who are accountable for those investments get up in the morning, the first thing on their minds is not "How do we better serve the public interest?". No, that's our job.

What these companies will do, however, is to provide the technical wherewithal for us to extend our services to every neighborhood in our communities and to every corner of the globe.

At long last, the technology is catching up with our mission. Let's make the most of the opportunity.

David B. Liroff
Vice President and Chief Technology Officer
WGBH Educational Foundation

“Evaluating Outreach: *Scholarship Assessed’s* Approach”

By Mary Taylor Huber
Senior Scholar
The Carnegie Foundation for the Advancement of Teaching

I’m absolutely delighted to be invited to speak at this conference about college and university outreach. And I agree that the topic could hardly be more timely. As **President Spanier** and **Anne Petersen** emphasized on Sunday [October 10, 1999], this is a moment of great change in higher education, marked in part by a decline of public trust in colleges and universities, but also by a renewed sense of engagement within the academy itself. Today, higher education institutions are looking anew at their historic mission of “service.” And on campuses across the country, there has been tremendous interest in exploring ways to recognize, encourage, and reward scholarly work that has a public address. A 1996 editorial in the *Civic Arts Review* caught the mood precisely: “We are all waiting for a new paradigm to be born, some vital new connection between what educators do and what societies need.”

There is, of course, a long and distinguished tradition of “outreach” in higher education, for which the great land-grant universities like Penn State are especially and rightly renowned. But over the years that service has become specialized. What’s new now is the sense that outreach should not be thought of only as an “extension” of the university, but that it should be suffused throughout. After visiting Madison in 1909, social critic **Lincoln Steffans** observed: “In Wisconsin, the university is as close to the intelligent farmer as his pig-pen or his tool-house; the university laboratories are part of the alert manufacturer’s plant ... ” Today’s vision of outreach and public service continues to embrace the agricultural agent and the consulting engineer, but it also envisions a great deal more. In order to fulfill today’s ideas about higher education’s “service” mission, faculty members and departments throughout the institution are being invited to rethink their scholarly agendas with an eye to contributing to community needs.

The good news is that many academics are excited about the prospect of designing and participating in projects that might help reconnect the disconnect between “gown” and “town.” The bad news is that work of this kind does not always fit comfortably within conventional definitions of scholarship and is therefore hard for the academy, despite its best intentions, to adequately recognize and reward. As **Charles Glassick, Gene Maeroff,** and I argue in *Scholarship Assessed*, a 1997 Carnegie Foundation report on the evaluation of the professoriate: “Academics feel relatively confident about their ability to assess specialized research, but they are less certain about what qualities to look for in other kinds of scholarship and how to document and reward that work” (1997:ix).

My task today is to explore *Scholarship Assessed's* perspective on the evaluation of outreach and public service, and to do so, I will address three points: First, I'll suggest that while the past decade has seen some progress in broadening the definition of what counts as scholarly work, there is still much to be done. Second, I want to look at some of the reasons why outreach remains something of a "country cousin" to teaching and research, focusing especially on questions of quality. Finally, I'll review our report's argument that the quality of outreach and public service can be evaluated by the same criteria the academy uses to judge other kinds of scholarly work. Ultimately, of course, the issue goes well beyond questions of faculty promotion and tenure. If higher education is to get smarter about engaging the larger community, it needs to develop a wider discourse about how to recognize excellence in the activities that can bring this engagement about. Or, to use the business language we heard from **Robert Cardy** Sunday night, "We need to interface with each other, so what we do is state-of- the-art."

What Counts as Scholarly Work

For those of you who are new to the conversation, let me note that *Scholarship Assessed* is the Carnegie Foundation's follow-up to *Scholarship Reconsidered,* the landmark report by **Ernest Boyer,** which put a broadened notion of "scholarship" on higher education's map.

Many of us can recall how common it was in the 1970s and '80s for discussion about faculty work to apply the term "scholarship" to specialized disciplinary research and publication and to treat teaching, interdisciplinary efforts, and professional service as softer, less rigorous activities of quite a different kind. *Scholarship Reconsidered* proposed that America's colleges and universities need a fresh vision of scholarship in order to tap the full range of faculty talents and encourage other activities that also need to be done. "Surely," Boyer argued in that report, "scholarship means engaging in original research. But the work of the scholar also means stepping back from one's investigation, looking for connections, building bridges between theory and practice, and communicating one's knowledge effectively to students" (1990:16). The report concluded that institutions consider broadening the scope of the term "scholarship" to recognize these four activities — discovery, integration, application, and teaching — as separate but overlapping dimensions of scholarship. It noted, too, that while these various types of scholarship are closely intertwined, the scholarly community's capacity to support, report, and evaluate them has been wildly uneven.

Let me pause a moment to say that the "scholarship of application" was never conceived only as the one-way application of academic expertise to real-life problems (although, of course, that is included). *Scholarship Reconsidered* emphasized the interaction, the back and forth, between theory and practice, and the "new intellectual understandings that can arise out of the very act of application" (1990:23). Indeed, in his last speeches and writings between 1994 and 1995, Boyer spoke not of the scholarship of application, but instead of the "scholarship of engagement," by which he meant those activities within any of the four scholarships which connect the academic with people and places outside the campus and which ultimately direct the work of the academy "toward larger, more humane ends" (1997:89).

Certainly the time was right for *Scholarship Reconsidered's* message, and lively discussions on campus and in the disciplines since the book's publication in 1990 have resulted in promising developments across the board. Innovation in the documentation and review of teaching has certainly led the field, but work on outreach has not been far behind. When the Carnegie Foundation surveyed chief academic officers in 1994, we found that more than 80 percent of the country's four-year colleges and universities had recently reexamined their systems of faculty roles and rewards or were planning to do so soon. Of these, about 80 percent reported that the expanded definition of scholarship on their campus included the full range of activities in which professors engage. About 80 percent again were broadening their definitions of teaching to include curriculum development, advising, and instructional research. And more than half the institutions were making a more careful definition of service, distinguishing applied scholarship or professional service from "citizenship" activities, like serving on committees or participating in community life (Glassick, Huber, and Maeroff 1997:12).

What are the varieties of outreach, and what part of it might count as scholarly work? We've heard a lot about the conservative role of the disciplines in the past couple of days, but in a truly remarkable enterprise in the early 1990s, **Bob Diamond** of Syracuse University invited scholarly societies and professional associations to think about what a broader definition of scholarship in their fields might involve. Historians, for example, recognized as "the application of knowledge" public history (including such things as public programming in museums, providing expert testimony on public policy, and historic preservation); professional service (editing journals and newsletters, organizing scholarly meetings, etc.); and community service drawing directly upon scholarship — through state humanities councils, for example, history day competitions, and the like. Mathematicians agreed that "exposition that communicates mathematics to new audiences" could count as scholarship. Chemists included "outreach" as a "scholarship area" and offered as examples activity in scientific literacy, K-12 enrichment, Extension service, ethics, and minority/gender recruitment to science careers (Diamond and Adam 1995).

Faculty members and departments throughout the institution are being invited to rethink their scholarly agendas with an eye to contributing to community needs.

Interest in outreach and public service climbed during the 1990s. A large literature in the scholarly and literary press developed around the role of the intellectual in public life; applied work gained new cachet in a number of disciplines, including my own — anthropology; and the numbers of professors experimenting with "service learning" grew by leaps and bounds. By the mid-1990s, national conferences convened by the American Association of University Professors, the American Association for Higher Education, and the American Council of Learned Societies were all exploring the themes of "engagement," "scholars' obligations beyond the academy," and "professors as citizens." The Thomas Ehrlich Faculty Award for Service-Learning was initiated by Campus Compact in 1995, while **Zee Gamson** and her colleagues at the New England Resource Center for Higher Education instituted the annual Ernest A. Lynton Award for Faculty Professional Service and Outreach in 1997.

This does not even begin to recognize work on individual campuses or among groups of campuses aimed at improving guidelines for reporting and reviewing efforts at their institutions to "connect" with the larger community. Naturally, universities want recognition from the public and their state legislators for this work. But, they're also asking how they can know for themselves if they're having an impact on their communities. We heard from **Lou Anna Kimsey Simon** yesterday about some of Michigan State's extraordinary experiments in this area. "Outreach activities," a recent Michigan State report says, "embody a set of institutional values related to the public university's responsibilities to guarantee that knowledge benefits the communities that support it" (1999:1). I might add that the Carnegie Foundation itself is seeking ways to represent the "service" function of institutions of higher education when the newly invented version of the Classification of Institutions of Higher Education comes out in 2005.

The more one looks in this area, the more one finds. For example, the Carnegie Foundation's National Survey of Faculty in spring 1997 found that during the past year, 82 percent of college and university professors had worked as a paid or unpaid consultant. That is something. Four out of five professors were engaged in professional service of some kind, over half with educational organizations, one-third with business or industry, one-fifth each with local government and private social service agencies, and 15 percent with national government agencies (See Huber 1998: Table 64). We don't know how much of this should be considered "outreach," but **Pat Book** reported yesterday that fully 60 percent of Penn State's faculty are so involved.

The ivory tower today received little support in the Carnegie survey: only 26 percent of faculty agreed that "the goal of an academic scholar is to advance knowledge without regard for the possible implications for society"; 60 percent said their institution "should be actively engaged in solving social problems," and 70 percent said that "universities have a responsibility to contribute to the economic development of their communities." Interestingly, the numbers were equally strong when faculty were asked whether they agreed that "faculty in my discipline have a professional obligation to apply their knowledge to problems in society" (See Huber 1998: Tables 137, 141, 140, 138). The story here is that a lot more outreach may be going on than people realize and that it is viewed by faculty in quite a positive light.

A Question of Quality

So what's the problem? Let me draw on statistics again for a start. In the same survey which showed that 82 percent of the faculty had done some work as a paid or unpaid consultant during the past year, just 49 percent agreed that serving as a consultant is considered part of scholarly work at their institution, and 50 percent thought that their department should give more recognition to the role of professional service and the applied aspects of knowledge. Perhaps the following numbers are the most telling: when asked which of their activities were regularly evaluated, teaching led with 96 percent, service to the college or university followed with 63 percent, research and/or other creative work followed with 57 percent, but applied scholarship/outreach, with 27 percent, was way behind (See Huber 1998: Tables 63, 72, 73).

Many scholars who have thought carefully about outreach and public service would see in such figures testimony to the lack of fit between these activities and the values that came to dominate the academy after World War II, as "basic" research gained federal support and public sway. **Donald Schoen** has questioned whether the "high, hard ground" of problems that concern contemporary science can deal with those important and challenging problems of human concern that lurk in the "swampy lowland where situations are confusing messes incapable of technical solution" (1983:42). **Amy Driscoll** and **Ernest Lynton** point out that much professional service "possesses distinct qualities that differ enormously from the work ... of traditional research scholarship" — collaborations and teamwork with academics and nonacademics, a heavy focus on process as "one of the most salient accomplishments of significant community engagement," and an emphasis on human interactions, as often the purpose is to "empower people with different needs, skills, and values" (1999:25–26).

This sense that the quality of applied work, professional service, and outreach is elusive and hard to grasp pervades those reports from the scholarly societies and professional associations that I mentioned before. For at the same time that they embrace more inclusive definitions of what might count as scholarship, they worry about how the academy can assure the quality of the work. For example, the Joint Policy Board for Mathematics states: "The results of scholarly activities must be public and must be amenable to evaluation" (1995:66). The Association of American Geographers emphasized that geography programs must "develop coherent, systematic plans for evaluating and valuing outreach roles" (1995:43–44). The American Chemical Society concurred, adding: "The task force recognizes the fact that mechanisms for gauging scholarship in areas outside of research are not generally or firmly in place. We encourage the creative development of new approaches to measure scholarship in chemistry across a broad spectrum of activities" (1993:47). Not surprisingly, deliberations on college and university campuses have come to the same conclusion. A 1991 task force on the reward system at the University of California, San Diego, for example, concludes that "to do proper justice to teaching and service contributions within the reward system, it is necessary to develop evaluation criteria and documentation methods to supplement those now in use" (1991:4).

It's not really surprising that outreach and professional service tend to slip through the cracks. In their important book *The New Production of Knowledge,* **Michael Gibbons** and colleagues note that any knowledge produced outside the intellectual and social structures which guide and evaluate academic research is likely to be problematical. "When significant numbers of scientists choose to work on problems that lie outside their specialisms, when they form teams with other specialists to work on complex projects, when in doing so they enter into arrangements with other social institutions which broaden the constituency of interests involved in setting agendas and priorities, and when performance is evaluated by an expanded peer group, then the legitimacy of outputs may be called into question" (1994:32). In other words, even the most well-meaning academic colleagues can have trouble evaluating work that responds to other institutions' agendas and follows others' norms for presentation and criteria of success. As one public historian complained: "Confronted with strange looking materials like environmental impact statements, museum displays, or historic structure reports, academics often respond suspiciously" (Clements 1988:6). The challenge to the academy is to find criteria for reviewing such work that respect its special character while making academic sense at the same time.

Scholarship Assessed

This, of course, is where *Scholarship Assessed* comes in. *Scholarship Assessed* says, in effect, that to give the four kinds of scholarly activities the weight that each deserves, they all must be held to the same standards of performance. The paradox is this: in order to recognize discovery, integration, application, and teaching as legitimate forms of scholarship, the academy must evaluate them by a set of standards that allows each its own "breathing room," while capturing and acknowledging what they share as scholarly acts. Can we find some criteria of "excellence" that can be applied not just to research or discovery, but also to scholarship in teaching, integration, and application? And can these same criteria accommodate engagement in each of these different modes? Traditionally, it is said, architects have judged a design by its "commodity," "firmness," and "delight." When academics judge a work of scholarship, what vocabulary of evaluation should they use?

This turns out to be a hard question to answer, in part because there are so many candidate vocabularies around. However, if you look carefully at current evaluation practice, you can find the elements of a common frame already in use. We asked more than 600 universities to send us information about faculty evaluation in teaching, research, and service, and we asked university presses, scholarly journals, and granting agencies about the criteria they ask reviewers to use in evaluating manuscripts and proposals for projects of all kinds. As you can imagine, these guidelines vary quite a lot: some are long, some are short; some are systematic, some are jumbled; and many include items tailored to highly specific needs. For example, the *Journal of Organic Chemistry* wants to know if the compounds reported are "adequately characterized with regard to identity and purity." The University of California Press asks hopefully if a book manuscript is "likely to be required reading in specific undergraduate or graduate courses?"

In the end, of course, the most remarkable thing is not how much is unique to each source, but how much they share. Most of the vocabularies of evaluation we examined have in common a set of terms to capture the way in which scholarly-professional work of any kind proceeds. Intellectual projects cannot be confined to any one product, moment, or performance. Discovery is not just what one found in the laboratory. Integration is not just insightful interpretation of others' findings. Application is not just clinical diagnosis or product design (See Lynton 1995). Even teaching, according to the Carnegie Foundation's new president **Lee Shulman,** is more than just the "active interactions between teacher and students in a classroom setting" (1998:5). In fact, we found that when people praise a work of scholarship they usually identify a staged sequence of activities, each of which embodies a familiar virtue:

1. Clear goals and
2. Adequate preparation;
3. Appropriate methods and
4. Significant results;
5. Effective presentation and
6. Reflective critique.

Now, everyone will recognize these criteria, because they tap into the language we share as academics and professionals — a language which enables us to capture the general quality of a colleague's reasoning and sharpness of mind (See Booth 1988). Their very obviousness suggests their applicability to a broad range of intellectual projects, while allowing the markers for what is clear, adequate, appropriate, significant, effective, and reflective to vary among different kinds of scholarly projects and tap into various discussions and debates about what is "cutting edge."

What I'd like to do now is to go over a set of questions that explore the range of meanings each criterion or standard suggests. As I do so, you might see if you think they're (potentially) applicable to the kinds of outreach projects we've heard about here over the past two days.

So get a project in mind and ask first about its goals: Are its basic purposes clearly stated? Are the objectives realistic and achievable? For much outreach and public service, this would involve consideration not only of the project's goals, but also the particular contribution that the scholar him- or herself has made. The third question to ask is whether the project addresses important questions in the field? This is particularly important for nontraditional areas of scholarly work. Certainly service projects should be designed to meet the nature and needs of their clients. But if service is to be treated as scholarship, it should also be designed to contribute to knowledge more widely. The principle here is similar to that in service learning, where the goal is not just for students to provide service, but to create a dialog between the classroom and the community site.

Adequate preparation is the second standard, and it has to do here with the expertise that the scholar brings. Does the project show an understanding of existing scholarship in the field? Here, I think, one would want to look for a mastery of literature from relevant disciplines and from similar projects, as well as an informed consideration of the ethical issues at play. Did the scholar bring to it the necessary skills, the artistry and rules of thumb one learns from doing, observing, and reflecting on one's own and others' work? And one must ask: Has he or she brought together the resources necessary to move the project forward? How well has the scholar marshaled the human, financial, institutional, and community support needed to meet project goals?

As a third standard, after goals and preparation, a good scholarly project uses appropriate methods. Have the methods been chosen wisely, applied effectively, and modified judiciously as a project evolved? Here one would want to know why a particular method of delivery of service was selected. And for much outreach, the processes involved in building a partnership, carrying the project forward, and managing sustainability are equally important. Methods probably cause the most trouble when inquiry is involved, because real-life settings such as classrooms, clinics, and communities, do not present ideal conditions for following many methodological protocols. This, of course, underlines the special importance of carefully matching methods and goals in outreach and public service, being clear about constraints, judicious in presenting what the project has achieved, and in suggesting which of its questions and answers warrant wider interest and why.

And this brings us to the fourth standard: whether a project had significant results. Did the project achieve its goals? Did it add consequentially to the field? Did it open up additional areas of exploration? Certainly the outcomes of public service should be positive changes in the situation in which one intervened. Service should actually help clients, however slippery or subtle the signs of success might be. That's very important. But the significance of these results is also a function of the explanation or interpretation they are given — What accounts for these outcomes? What is this a case of? How can others learn from or build on what this project has achieved? Here I should stress the importance of efforts like **Lorilee Sandmann's** and **Amy Driscoll's** to develop networks of peers who understand outreach and public service. As **Richard Rorty** has said, it is peers who will decide "what counts as a relevant contribution, what counts as answering a question, what counts as having a good argument for that answer or a good criticism of it" (1979, cited in Becher 1989:26).

The fifth standard we discuss in *Scholarship Assessed,* effective presentation, refers to the fact that for any act of scholarship, there are multiple audiences that one can choose to address. The questions to ask about presentation, then, are whether the work has been presented in a suitable style for its various audiences and in appropriate forums. One would also ask if the message was presented in all these forums with integrity. Clearly outreach's primary audience (if that's the right term) are one's partners and clients in the field — the people to whom one's work is initially addressed. But when talking about the scholarship of engagement, it is important to underline the necessity of communicating also with academic peers. Without such communication, a community of discourse about outreach in one's field cannot be established nor will that particular area of outreach benefit from lessons learned. This is not an easy task: new forums for sharing this work need to be developed, and new genres, like project portfolios, are well, still very new.

Our final standard is that scholarly work must be accompanied by a reflective critique. With reflection, the scholar moves beyond contributing to the community and to the field. This is the "formative" moment, when the scholar steps back to think about the results of the project and the response it has provoked, and uses it all to contribute to his or her ongoing and future work. Has the scholar critically evaluated the project? Has she sought comments from community partners, academic colleagues, and

The challenge to the academy is to find criteria for reviewing such work that respect its special character while making academic sense at the same time.

students? And has she used this evaluation to improve the quality of future work? This process of reflection can also provide the ideas and impetus to link projects of different kinds to make them integral parts of some larger intellectual quest.

One could summarize the main argument of *Scholarship Assessed* with a grid like this, which has the dimensions of quality down the side and the different kinds of scholarship across the top. These dimensions enable one to keep in view the qualities that discovery, integration, application, and teaching share as scholarly activities, while probably allowing enough flexibility to be applied judiciously to different types of work. And if it can do that much, I would suggest that it may also be helpful in thinking about the more engaged forms of each of the scholarly types. Indeed, it's hard to imagine any scholarly work worthy of the name that did not adhere to standards something like these. Clear goals, adequate preparation, appropriate methods, significant results, effective communication, and reflective critique define important aspects of excellence for all scholarly work.

Conclusion

Finally, let me close with a comment on the purpose of books like *Scholarship Reconsidered* and *Scholarship Assessed*. They provide suggestions for change, but the suggestions are intended first and foremost as an invitation to others to join the debate. When the topic is faculty evaluation, the debates that matter most are those concerned with the particulars of individual cases. But this is not to say that other levels of debate don't matter. Clearly, they do. Debates about the kinds and quality of faculty work that take place in the higher education press, in scholarly society meetings, in the faculty senate, in department meetings, and even in the hallways, all inform the actual cases for tenure and promotion that people are able to make for themselves or their colleagues. And, in turn, as more people are successful in making such cases on the basis of broader notions of scholarship, others will be strengthened in their resolve to do so as well. As Ernest Boyer noted in his prologue to *Scholarship Assessed*, "My own personal hope for this Carnegie report is that it will contribute to the current constructive debate about the role of the professoriate, and that from such discourse common language will begin to emerge within the academy about the meaning of scholarship and how it might be authentically assessed" (in Glassick, Huber, and Maeroff 1997:3).

Acknowledgments: This paper draws some passages from the Carnegie Foundation report *Scholarship Assessed* (Glassick, Huber, and Maeroff 1997). For further discussion of issues addressed in this paper, I thank Barbara Cambridge of the American Association for Higher Education.

Comments and suggestions are welcome. Please contact the author at The Carnegie Foundation for the Advancement of Teaching, 555 Middlefield Road, Menlo Park, CA 94025, or by e-mail, huber@carnegiefoundation.org.

Mary Taylor Huber
Senior Scholar
The Carnegie Foundation for the Advancement of Teaching

References

American Association for Higher Education. 1995. The Engaged Campus. National Conference on Higher Education, Washington, D.C., March.

American Association of University Professors. 1995. Professors as Citizens. Annual Meeting, Washington, D.C., June 7–11.

American Chemical Society, report form for reviewers, *The Journal of Organic Chemistry* (Berkeley, Calif.).

______. 1993. Report of the Task Force on the Definition of Scholarship in Chemistry. Reprinted in Bronywn E. Adam and Alton Roberts, *Differences Among the Disciplines in Recognizing Faculty Work: Reward Systems for the Year 2000*, ed. Robert M. Diamond and Bronwyn E. Adam. San Francisco: Jossey-Bass.

American Council of Learned Societies. 1995. Beyond the Academy: A Scholar's Obligations. Annual Meeting, New York, N.Y., April.

American Historical Association. 1995. Redefining Historical Scholarship. In *The Disciplines Speak: Rewarding the Scholarly, Professional, and Creative Work of Faculty*, ed. Robert M. Diamond and Bronwyn E. Adam. Washington, D.C.: American Association for Higher Education.

Association of American Geographers. 1995. Statement. In *The Disciplines Speak: Rewarding the Scholarly, Professional, and Creative Work of Faculty*, ed. Robert M. Diamond and Bronwyn E. Adam. Washington, D.C.: American Association for Higher Education.

Becher, Tony. 1989. *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines.* Buckingham, U.K.: Society for Research into Higher Education and The Open University Press.

Booth, Wayne. 1988. The Idea of a University — As Seen by a Rhetorician. In *The Vocation of a Teacher: Rhetorical Occasions,* 1967–1988, by Wayne Booth, 309–334. Chicago: University of Chicago Press.

Boyer, Ernest L. 1990. *Scholarship Reconsidered: Priorities of the Professoriate.* Princeton, N.J.: The Carnegie Foundation for the Advancement of Teaching.

______. 1997. Selected Speeches, 1979–1995. Menlo Park, Calif.: The Carnegie Foundation for the Advancement of Teaching.

Civic Arts Review. 1996. Editorial. *Civic Arts Review* 1 (9):3.

Clements, Kendrick A. 1988. Promotion and Tenure for Public Historians. Organization of American Historians Council of Chairs Newsletter. Bloomington, Ind., April 6.

Diamond, Robert M., and Bronwyn E. Adam, eds. 1995. *The Disciplines Speak: Rewarding the Scholarly, Professional, and Creative Work of Faculty*. Washington, D.C.: American Association for Higher Education.

Driscoll, Amy. 1999. Making Outreach Visible: A Guide to Documenting Professional Service and Outreach. Washington, D.C.: American Association for Higher Education.

Gibbons, Michael, Camille Limoges, Helga Nowotny, Simon Schwartzman, Peter Scott, and Martin Trow. 1994. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies.* London: Sage Publications.

Glassick, Charles E., Mary Taylor Huber, and Gene I. Maeroff. 1997. *Scholarship Assessed: Evaluation of the Professoriate.* San Francisco: Jossey-Bass.

Huber, Mary Taylor. Community College Faculty: Attitudes and Trends, 1997. Stanford, Calif.: The National Center for Postsecondary Improvement, Stanford University.

Joint Policy Board for Mathematics. 1995. Recognition and Rewards in the Mathematical Sciences. In *The Disciplines Speak: Rewarding the Scholarly, Professional, and Creative Work of Faculty,* ed. Robert M. Diamond and Bronwyn E. Adam. Washington, D.C.: American Association for Higher Education

Lynton, Ernest A. 1995. Making the Case for Professional Service. Washington, D.C.: American Association for Higher Education.

Michigan State University. 1999. Institutional Indicators for Outreach: Beyond Counting, June.

Rorty, Richard. 1979. *Philosophy and the Mirror of Nature.* Princeton: Princeton University Press.

Schoen, Donald A. 1983. *The Reflective Practitioner: How Professionals Think in Action.* New York: Basic Books.

Shulman, Lee S. 1995. Course Anatomy: The Dissection and Analysis of Knowledge Through Teaching. In *The Course Portfolio: How Faculty Can Examine Their Teaching to Advance Practice and Improve Student Learning,* ed. Pat Hutchings. Washington, D.C.: American Association for Higher Education.

Steffens, Lincoln, 1909. Sending a State to College. American Magazine (February 1909). Reprinted in *Portraits of the American University* 1890–1910, comp. James C. Stone and Donald P. DeNevi. San Francisco: Jossey-Bass, 1971:133.

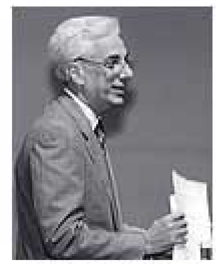
University of California Press, confidential manuscript reading report (Berkeley, Calif.).

University of California, San Diego. 1991. Report of the Task Force on Faculty Reward System, October.

Assessing Scholarship as a Guide to Promoting Outreach

By Celena E. Kusch
Staff Writer
Outreach Communications
Penn State University

The number of higher education institutions that have already changed promotion and tenure guidelines or are currently involved in conversations about those guidelines is evidence that assessing scholarship in broader terms is near the top of the higher education agenda.


Joseph DiGregorio


Katherine Fennelly


Lyla Houglum

Following the plenary speech by **Mary Taylor Huber,** senior scholar of the Carnegie Foundation and co-author of *Scholarship Assessed,* panelists who addressed the theme of “Scholarship Assessed — Potential and Pitfalls” offered a useful commentary not only on the book by that name, but on the project of assessing scholarship as well. The panel included **Lyla Houglum,** dean and director of Extension Service at Oregon State University; **Katherine Fennelly,** professor of public policy in the Hubert H. Humphrey Institute of Public Policy at the University of Minnesota; and **Joseph DiGregorio,** vice provost for Distance Learning, Continuing Education, and Outreach at the Georgia Institute of Technology.

Joseph DiGregorio noted the significant need for dialogue and guidance in this endeavor.

“For the past twenty years or so, the Carnegie Foundation for the Advancement of Teaching has indeed been doing a better job than universities have in defining what we mean by faculty scholarship, in proposing standards to guide us in our definitions of this important topic, and in suggesting ways to evaluate such scholarship,” he said. *Scholarship Assessed,* DiGregorio added, “is helping us to define clear standards for assessing and evaluating faculty scholarship.”

For **Lyla Houglum,** *Scholarship Assessed* represents the guiding principle for serious institutional policy revisions at Oregon State University. Her address offered a case study of the reassessment of scholarship through the major policy changes instituted by the University’s former president as Oregon State developed a growing familiarity with *Scholarship Assessed.*

The policy changes related specifically to outreach units at the university were:

- Administration of Cooperative Extension was moved out of the College of Agricultural Sciences.

- A newly appointed dean and director of Extension began to report directly to the provost.

- Cooperative Extension programs were divided among the academic deans who became responsible for providing leadership for Extension programs in addition to their responsibilities for the teaching program and the research program.

- All Extension faculty appointments were shifted to academic homes, including those Extension specialists on campus, as well as county Extension agents.

- All three missions of the University (teaching, research, and service) were recognized and rewarded through one promotion and tenure process governed by one set of promotion and tenure guidelines which recognize multiple forms of faculty scholarship.

- All departments and colleges configured their promotion and tenure committees to enable the appropriate evaluation of all three missions.

- The dean and director of the Extension Service assumed a position within the university's promotion and tenure committee, ensuring that the university committee could also appropriately evaluate all three missions.

According to Houglum, the process of implementing these changes and revising the University's promotion and tenure guidelines sparked an institution-wide discussion and debate about scholarship in which *Scholarship Assessed* became an invaluable resource.

"We felt that we must have a definition of scholarship that we could all buy into," Houglum explained. "Without it, we could not create one set of guidelines and one system that would cover all three missions of the University. As a result, we developed a definition of scholarship as *creative intellectual work that is validated by peers and communicated*. It's a very straightforward three-part definition. All three parts must be there in order for an activity to be considered scholarship. We go back to this definition over and over and over as we go through promotion and tenure dossiers."

Houglum returned to this emphasis on faculty buy-in throughout her address. As Oregon State policies evolved, she explained, there was extensive support for the concept that scholarship is more than just research, but it became more difficult in applying the new definition of scholarship to measures for assessing it. During the presentation, she told the story of one of the first promotion and tenure reviews to be completed under the new system. After reviewing a dossier with a significant outreach component, two members of the faculty committee abstained from voting. Both members independently provided letters explaining their abstinence as a result of feeling unqualified to assess outreach scholarship.

County Extension faculty are serving on department and college promotion and tenure committees, and teaching and research faculty are including outreach in their dossiers, which now works for them in the promotion and tenure process.

This incident triggered several meetings, Houglum noted, and led the way for even more significant changes in attitude and behavior. According to Houglum, academic deans throughout the university successfully worked to support and defend the new policies and to support their implementation. Now, she added, "county Extension faculty are serving on department and college promotion and tenure committees, and teaching and research faculty are including outreach in their dossiers, which now works *for* them in the promotion and tenure process."

Houglum's case study provided useful insight into the scope of the project institutions undertake when reforming the way they assess scholarship. For most institutions which have not made this kind of overhaul, and for Oregon State itself, this process places serious demands on both faculty and administrators.

"I can assure you that this has not been an easy process to go through," Houglum admitted, "but *Scholarship Reconsidered* and *Scholarship Assessed* have provided an absolutely wonderful foundation for helping us develop new guidelines and implement a different way of evaluating scholarship at Oregon State University."

For **Katherine Fennelly,** those texts not only lay a foundation for current improvements, but should also be used to point to the next set of challenges that outreach-based progress will face.

"In *Scholarship Assessed*, Glassick, Huber, and Maeroff state that the process of evaluation should embody goals that leave no doubt about expectations for institutional and individual performance," Fennelly said. "They go on to say that unfortunately faculty over the last generation have received mixed messages about what work counts. Well, I submit that we are still receiving mixed messages. We do have public statements, and we do have changes in some of the committees and some of the procedures, but we've got to go beyond that and to really think about one university and one system of outreach that doesn't compartmentalize our work and devalue it."

The greatest hurdle to that acceptance Fennelly cites is attitudinal.

“I think that few of us would disagree that outreach is a stepsister to research and teaching at our institutions,” Fennelly said. Although she admits that administrative and policy changes provide a message that backs outreach, she stated, “I think we are still very far from recognizing and rewarding high-quality outreach on a par with research and teaching.”

Her address identified the often “clearer messages” that undervalue outreach and undermine equitable rewards for outreach scholarship. According to Fennelly, the messages institutions give and receive in awarding distinguished professorships to research-focused faculty and in highlighting grants, research breakthroughs, and innovations in teaching on Web sites and in major public relations instruments of institutions all “demonstrate value in research and not in outreach.”

Fennelly’s address outlined other factors that “mitigate against recognition and valuing quality outreach,” including the exclusion of outreach from national rankings, enormous salary disparities between research and outreach faculty, and internal fiscal policies that devalue outreach.

Responding to these institutional realities, DiGregorio noted that in the wake of those forces, we may not only fail to assess scholarship well enough, but we may be missing an opportunity to promote a new kind of scholarly quality in our faculty. His address called for the continued reconsideration of scholarship in light of outreach and asked the audience to go beyond the standards for judging scholarship to examine the very expectations we have for our scholars.

“As we heard this morning and as described in *Scholarship Assessed*, Mary Huber and her colleagues have shown us how to recognize those qualities associated with a scholar’s character that are recognized by virtually all higher education institutions as consequential not only for the individual professor, but also for the entire community of scholars. Mary and her colleagues have defined three such qualities of a scholar, namely integrity, perseverance, and courage,” DiGregorio explained.

After applying these qualities to the scholarship of engagement, however, DiGregorio suggested that this list of qualities is “woefully incomplete.” “In my mind, the qualities of a scholar involved in public service and outreach go well beyond integrity, perseverance, and courage.”

He offered seven additional qualities of an involved scholar. These qualities include accessibility to the local community which seeks faculty expertise and experience in solving local community problems, responsiveness, sensitivity, caring, concern, commitment to community, and involvement without personal bias or prejudice. Such a list, DiGregorio explained, might enhance institutions’ ability to assess scholarship by expanding the realm of scholarship itself.

To create a climate that stimulates and cultivates such qualities, DiGregorio set forth seven expectations for the scholarly institution, including visible support of engagement, continuous public encouragement from leaders, a focus on successful examples, a commitment to engagement, a sincere concern for the community, a commitment to partnership and reciprocity in assessing the needs of local communities, and institutional policies and procedures that "help, rather than hinder, outreach."

This attention to the promotion of outreach activities as an integral part of assessing scholarship served as a common thread among the panelists. Although none of the speakers provided easy solutions for applying the principles of *Scholarship Assessed* to current conversations about tenure and promotion guidelines, all pointed to the tremendous potential of this project for changing the face of higher education.

Lyla Houglum
Dean and Director, Extension Service
Oregon State University

Katherine Fennelly
Professor of Public Policy, Hubert H. Humphrey
Institute of Public Policy
University of Minnesota

Joseph DiGregorio
Vice Provost for Distance Learning, Continuing
Education, and Outreach
Georgia Institute of Technology

Utah State Delegation Strategizes about Outreach at Penn State Team Decision Center


Robert Gilliland

Robert Gilliland, vice president for university extension at Utah State University, and a group of thirteen Utah State administrators and deans met at Penn State's Team Decision Center to discuss their university's outreach and extension mission. Gilliland organized the strategic planning session in conjunction with the Best Practices in Outreach and Public Service Conference, held at Penn State in October 1999.

"The conference offered a wonderful opportunity for us to bring together our senior leadership team and deans of academic units to share a common experience," Gilliland said. "It served as a springboard for our strategy session on how we can integrate outreach into Utah State's teaching, research, and service mission. Since returning to campus, we have continued our outreach planning efforts."

The Utah State delegation gathered at the Team Decision Center for a day and a half following the Best Practices in Outreach and Public Service Conference. **Michael J. Martin,** special assistant to the vice president for Outreach and Cooperative Extension at Penn State, assisted Gilliland in organizing the strategic planning session. **John E. Park,** Penn State's associate director of Management Development Programs and Services, facilitated the meeting. Penn State's Team Decision Center is computerized and enables participants to use technology to quickly identify issues for discussion, collect and analyze information, explore the options, and reach consensus.

Outreach and Cooperative Extension Leadership

James H. Ryan, Vice President for Outreach and Cooperative Extension

Theodore R. Alter, Associate Vice President for Outreach and Director of Cooperative Extension

Patricia A. Book, Associate Vice President for Outreach and Executive Director of Continuing Education

Theodore F. Krichels, Assistant Vice President for Outreach and General Manager of Penn State Public Broadcasting

Gary E. Miller, Associate Vice President for Distance Education and Executive Director of the World Campus

Best Practices in Outreach and Public Service Planning Committee

Talat Azhar, Research Associate, Outreach Office of Marketing Research

Melissa Beidler, Conference Planner, Conferences and Institutes

Mark Bernhard, Senior Conference Planner, Conferences and Institutes

Jeri Childers, Conference Chair, Assistant Director, Outreach Office of Program Development

Janice Ferguson, Marketing Manager, Outreach Office of Marketing Communications

James Fong, Director, Outreach Office of Marketing Research

Cheryl George, Staff Assistant, Conferences and Institutes

Judy Hall, Conference Planner, Conferences and Institutes

Tracey D. Huston, Director, Office of Outreach Communications

Michael J. Martin, Special Assistant to the Vice President for Outreach and Cooperative Extension

Connie Pukanic–Smails, Executive Producer, Penn State Public Broadcasting

Michelle Rodgers, Regional Director for Capital Region, Cooperative Extension

Jacklyn S. Rosenfeld, Director, Outreach Office of Marketing Communications

Dan Williams, Staff Assistant, Outreach Office of Program Development

Jeanne Williams, Program Development Specialist, Outreach Office of Program Development

Sue Witherite, Staff Assistant, Conferences and Institutes

John Wozniak, Web Manager, Outreach Office of Marketing Communications

Monograph Editorial Staff

Tracey D. Huston, Monograph Executive Editor and Director of Outreach Communications, Office of Outreach Communications

Deborah A. Benedetti, Writer/Editor, Office of Outreach Communications

Celena E. Kusch, Writer/Editor, Office of Outreach Communications

Sandra L. Rothrock, Staff Assistant, Office of Outreach Communications

Dick Ackley, Photographer, University Photo/Graphics

Dave Shelly, Photographer, University Photo/Graphics

Curt Krebs, Photographer, University Photo/Graphics

Jim Lukens-Gable, Art Editor, Penn State Document Services