

UNIVERSITY OUTREACH

UNIVERSITY CONNECTIONS TO SOCIETY



*Collected writings from presidential symposia on the
land-grant university and contemporary society,
and reports of strategic outreach committees*

Muse ♦ McPherson ♦ Byrne ♦ Heilman ♦ Flynt

Auburn University



UNIVERSITY OUTREACH
University Connections to Society



UNIVERSITY OUTREACH
University Connections to Society

William V. Muse

Peter McPherson

John V. Byrne

John G. Heilman

J. Wayne Flynt

University Outreach: University Connections to Society is an abridged compilation of lectures from the Presidential Symposia on the Land-Grant University and Contemporary Society. This volume includes the committee reports *Strategic Planning for University Outreach at Auburn University* and *Faculty Participation in Outreach Scholarship: An Assessment Model*.



Auburn University

A Land-Grant University • Equal Opportunity Educational Institution

August 2000

A publication of the Office of the Vice President for University Outreach; David Wilson, Associate Provost & Vice President for University Outreach; Robert Montjoy, Assistant Vice President for University Outreach. Published by the Office of Outreach Information and Marketing; Ralph Foster, Director.

Publication design: Janie Echols-Brown. Editing: Maury Matthews and Susan Roberson.

*For more information:
(334)844-5700 or (334)844-4730
e-mail - outreach@auburn.edu
website - www.auburn.edu/outreach*



UNIVERSITY OUTREACH

University Connections to Society

CONTENTS

Foreword	<i>xiii</i>
<i>David Wilson</i>	
University Outreach in the Twenty-First Century	15
<i>William V. Muse</i>	
Outreach and University Accountability	29
<i>Peter McPherson</i>	
Beyond Campus Borders	37
<i>John V. Byrne</i>	
Strategic Planning for University Outreach at Auburn University	51
<i>John G. Heilman and the University Outreach Strategic Planning Committee</i>	
Faculty Participation in Outreach Scholarship: An Assessment Model	77
<i>J. Wayne Flynt and the Committee on Assessment of Outreach</i>	



ABOUT THE LECTURERS AND COMMITTEE CHAIRS

William V. Muse

On March 1, 1992, Dr. William V. Muse became the 15th President of Auburn University. He serves as Chief Executive Officer of the land-grant university for Alabama, the state's largest institution of higher education.

A native of Mississippi, Dr. Muse attended the University of Arkansas, earning an MBA and a Ph.D. in Business Administration. Dr. Muse held faculty positions at Georgia Tech and Ohio University, before his selection as the first Dean of the College of Business at Appalachian State University in Boone, North Carolina. He later served in deaconal appointments at University of Nebraska at Omaha and Texas A&M University. He was one of 50 individuals selected to go to Washington, D. C. to serve as a Presidential Exchange Executive and worked with the U. S. Office of Education. Prior to his appointment at Auburn, Dr. Muse served as President of the University of Akron, the third largest university in Ohio with a total enrollment of approximately 30,000 students.

Dr. Muse is a past president of the Southern Business Administration Association and currently serves as a member of the Board of Directors of the Alabama Power Company, American Cast Iron Pipe Company, SouthTrust Bank, the Alabama School of Mathematics and Science, and the Alabama Council on Adult Education. Nationally, he is a director of the Teke Educational Foundation and is President of the Southeastern Conference (SEC). Dr. Muse has been featured as an "Outstanding Young Man of America" and is listed in "Who's Who in America." He is the author of three books and numerous articles in the areas of higher education, management, and marketing.

Peter McPherson

Peter McPherson brings his experience from business and political realms into his role as Michigan State University's 19th president. With strong family ties to Michigan State, President McPherson earned his bachelor of arts degree in political science from MSU in 1963. After serving in the Peace Corps in Peru, he earned his MBA at Western Michigan University and a law degree from American University Law School.

During a successful career in the private and public sectors, he has been a tax lawyer and a bank executive, and has held key positions in the federal government. President

McPherson worked at the Bank of America as group executive vice president in charge of domestic and international private banking, trust and investment operations. As deputy secretary of the U.S. Treasury Department, he focused on trade, taxation and international issues; he later served as acting secretary of the treasury. As administrator in the Agency for International Development, he headed the U.S. response to the famine in Africa. President McPherson also has worked as a partner and head of a Washington, D.C., law firm, as a special assistant to President Gerald Ford and as a tax law specialist in the Internal Revenue Service.

His appointment as MSU president was confirmed unanimously by the Board of Trustees in August 1993 and he began his administration the following October.. President McPherson has a firm philosophy that, in the 1990s, land-grant institutions must be centers of “intellectual excellence combined with problem solving.”

John V. Byrne

John V. Byrne is President Emeritus of Oregon State University. He served as OSU's 12th president from November 1984 through December 1995. Born in Hempstead, New York, Byrne received all his academic degrees in geology from Hamilton College (B.A. 1951); Columbia University (M.A. 1953); and University of Southern California (Ph.D. 1957).

His career included three years as a research geologist with the Humble Oil and Refining Company; sixteen years in Oceanography at OSU as a faculty member, department head and dean; five years as Dean of Research, Dean of the Graduate School, and Vice President for Research and Graduate Studies at OSU; and more than three years as Administrator of the National Oceanic and Atmospheric Administration.

As president of OSU, he guided Oregon State through a period of turbulence brought about by severe budget restrictions caused by a property tax limitation ballot measure. During this period, OSU continued to grow in programs, facilities and external funding. Byrne was one of the first to introduce Total Quality Management techniques to higher education. He emphasized the importance of international education for students at OSU, and was a supporter of significant academic reform in higher education.

He continues to be active in matters of higher education reform, serving in a senior advisory capacity in the Oregon State System of Higher Education and as Executive Director of the Kellogg Commission on the Future of State and Land-Grant Universities.

John G. Heilman

John G. Heilman was born and raised in New York City, and took his undergraduate work at Lafayette College, majoring in English and French. He set forth on graduate study in the field of political science at New York University, where he specialized in research methods and German politics, and was awarded the Ph.D. in 1973. In that same year he was appointed assistant professor of political science at Auburn University.

At Auburn Heilman became involved in policy studies and program evaluation. For nearly two decades he conducted nationally funded applied research and outreach projects in fields including energy policy, criminal justice, appellate court procedure, water policy, and privatization of public sector infrastructure. He helped to organize, and served as Auburn's first director of, the Ph.D. program in public administration and policy.

In 1992 John Heilman was appointed Associate Dean for Research in Auburn's College of Liberal Arts; he was appointed interim dean in 1997, and became dean of the college in 1999. In 1997 he chaired the Education Committee of the City of Auburn's 2020 planning project, and since 1999 he has served as a member of the Auburn City Council. As dean he has emphasized comprehensive planning and assessment, and as city councilman he has emphasized balanced and carefully managed economic development.

J. Wayne Flynt

Distinguished University Professor of History Wayne Flynt grew up in Alabama and attended Samford University where he was a history/theology student. After graduation, he continued his studies at Florida State University, where he received his Ph.D. in 1965, specializing in Southern political history. In subsequent years, his research interest turned to poverty and religion.

Of his ten books, three deal with poverty and two with evangelical religion. Two of his books have been nominated for Pulitzer Prizes, and one won the Lillian Smith Award for non-fiction, which is given by the Southern Regional Council.

Flynt is also a community activist, having served for a decade on the American Cancer Society's Committee for the Socioeconomically Disadvantaged, as a founder of the Alabama Poverty Project, and as a member of Voices for Alabama's Children.

These involvements resulted in his selection by the Mobile Register as Alabamian of the Year in 1992 and for the Friend of Children Award by the Children's Hospital of Alabama in 1994. He was also asked by Governor James E. Folsom, Jr. and Judge Eugene Reese to act as the official facilitator of Alabama's school equity funding lawsuit, which was an attempt by three groups of plaintiffs to ensure adequate and equitable funding for Alabama's public schools.

Professor Flynt has spoken around the world on problems of the poor, including a lecture tour of India sponsored by the U.S. Information Service.



FOREWORD

For the last few years, Auburn University has participated in the national discussion within the academy regarding academic relevance and scholarly engagement. This volume is dedicated to extending that discussion. But first, let me provide some background regarding the material contained in this publication, *University Outreach: University Connections to Society*.

Since inception, the American land-grant university has been concerned with service to the people of its state, the nation, and the world. Serving as a “people’s university,” the land-grant institution has developed substantial research capabilities to enable it to address the varied needs of society. The land-grant tripartite mission combining instruction, research and outreach is the greatest strength in assuring the relevance of the university to its constituents. However, with today’s shrinking educational appropriations, even the modern land-grant university is challenged to demonstrate its relevance to the contemporary issues and problems facing the American public.

Recognizing this challenge, universities across America have begun to examine the manner in which they relate to society: how they teach undergraduates, how they provide graduate and professional education, how they conduct research programs, and-- not the least in this progression -- how they provide outreach services, consultation and technical assistance, distance education and life-long learning. Universities are concerned how they can be effectively involved in mutual problem-solving focused on persistent and difficult problems of daily life. This can only be accomplished if the university’s primary resource, the faculty, is appropriately engaged to perform such outreach.

Universities face two problems in fostering relevant engagement. First, there must be consensus about what outreach is, agreement about its desired objectives and outcomes, and methods to assess and evaluate impact. Second, there must be a university environment in which participation in outreach is a legitimate option for faculty effort, duly recognized and rewarded and properly supported. The first issue is one of effective strategic planning, but the second is a problem of academic culture. Most institutions of higher education, including those with an historical emphasis on a tripartite academic mission, have focused assessment of faculty scholarship for tenure, promotion and reward largely on research performance.

The singular orientation to research as the measure of faculty performance -- especially in a land-grant institution where, theoretically, teaching and service hold equal status -- is the subject of much debate in the academy. In *Scholarship Reconsidered: Priorities of the Professoriate*, the late Ernest Boyer noted:

“Research and publication have become the primary means by which most professors achieve academic status, and yet many academics are, in fact, drawn to the profession precisely because of their love for teaching or for service even for making the world a better place. Yet these professional obligations do not get the recognition they deserve, and what we have, on many campuses, is a climate that restricts creativity rather than sustains it.”¹

Boyer speaks eloquently of the value of all scholarly pursuits, including outreach or “the scholarship of application.” While many may agree with such a value system, the problem

1. Ernest L. Boyer, *Scholarship Reconsidered: Priorities of the Professoriate*, 1990, Carnegie Foundation, p.xii

lies in how to assess faculty outreach for consideration in reward, promotion, and ultimately, tenure.

To address these questions at Auburn University, I appointed a University Outreach Strategic Planning Committee, chaired by Professor (now Dean) John G. Heilman, and a University Committee on Outreach Assessment, chaired by Distinguished University Professor J. Wayne Flynt. Both committees, whose members are listed within this volume, were broadly representative of the University's academic schools and colleges, the faculty ranks, and Outreach staff. The reports produced by each committee provide a road map for the development of University Outreach well into the Twenty-first Century and establishes a model for assessing outreach as part of a balanced faculty reward structure at Auburn University.

Each made a solid contribution to the national discussion about state and land-grant universities. To the credit of these fine works, the National Association of State Universities and Land Grant Colleges (NASULGC) featured Auburn University as one its model outreach programs highlighted at its national conference. The reports also served as the basis for the Kellogg Foundation-supported Presidential Symposia which stimulated our own local discussion on faculty engagement. Visiting university presidents John Byrne of Oregon State and Peter McPherson of Michigan State joined our own President William Muse in a series of innovative discussions focused on University Outreach in contemporary society.

Over the last two years, university program prioritization, reallocation of resources and strategic planning have drawn the full attention of the academic community. Auburn University now has advanced its "Peaks of Excellence" and our new Provost William Walker has engaged the university in developing effective and relevant strategic plans which can be assessed for impact. Once again, the stage is set for discussing and, more importantly, implementing a plan to stimulate relevant faculty engagement in outreach activities.

In January 2000, I appointed Robert Montjoy as assistant vice president for University Outreach. Among his many duties, he is charged with working with the deans, department heads, faculty and University Senate leadership to implement the recommendations of Flynt Committee report. We have established this objective as a priority within the FY 2001 University Outreach strategic goals.

To support that objective, this volume reacquaints faculty with the collective works of the three symposia and the two outreach committees. The contents have been abridged from the proceedings of the symposia, while the committee reports are published in their entirety. This compilation stands on its own as a most credible institutional companion to Boyer's *Scholarship Reconsidered* and the sequel to that report, *Scholarship Assessed: Evaluation of the Professoriate*². I dedicate this volume to your review in the spirit of those academic milestones which have contributed much to the expansion of outreach as a viable scholarly pursuit.

David Wilson
Associate Provost and Vice President
for University Outreach
Auburn University

August 2000

2. Charles E. Glassick, Mary Taylor Huber and Gene I. Maeroff, *Scholarship Assessed: Evaluation of the Professoriate*, 1997, Carnegie Foundation

UNIVERSITY OUTREACH IN THE TWENTY-FIRST CENTURY

William V. Muse

The perspective I bring to this discussion is inspired not merely by my experience at Auburn, but has developed during my involvement in outreach activities at several universities over the past thirty-plus years. My observations should not be regarded necessarily as policy initiatives here at Auburn, but as thoughts designed to contribute to an essential, current dialogue.

Let me begin by framing some direct questions that may be on your mind:

- Why is it that these university presidents have agreed to address this topic?
- What is its relevance to Auburn?
- What is University Outreach, and why have we chosen it as a focus of our discussion?
- Why do we particularly address you, the faculty? And,
- What does Outreach have to do with the future of Auburn University?

Answers to these questions will emerge at various points, but let me begin by considering why these presidents have agreed to talk about Outreach? The Wingspread Report of 1993, "An Open Letter to Those Concerned about the American Future," reached this uncomfortable conclusion about American higher education:

A disturbing and dangerous mismatch exists between what American society needs of higher education and what it is receiving.

That report posed a timely question:

What does our society NEED from higher education? It needs stronger, more vital forms of community. It needs an informed and involved citizenry. It needs graduates able to assume leadership roles in American life. It needs a competent and adaptable workforce. It needs very high quality undergraduate education producing graduates who can sustain each of these goals. It needs more first-rate research pushing back the important boundaries of human knowledge and less research designed to lengthen academic resumes. It needs an affordable, cost-effective educational enterprise offering lifelong learning. Above all, it needs a commitment to the American promise—the idea

that all Americans have the opportunity to develop their talents to the fullest. Higher education is not meeting these imperatives.

In brief, the presidents share the view that we are at a critical time with respect to public confidence in and expectations of our universities. There is a national discussion underway led by such respected institutions as Michigan State University, the Universities of Wisconsin and Minnesota, Iowa State, Ohio State, Oregon State, Cornell and others. Quite aware of the importance of this inquiry, the Kellogg Foundation, in conjunction with the National Association of State Universities and Land-Grant Colleges, has recently created a Commission on the Future of the State and Land-Grant University.

...we are at a critical time with respect to public confidence in and expectations of our universities.

Dr. William C. Richardson, president of the Kellogg Foundation and former president of The Johns

Hopkins University, noted that this Commission will foster a much needed and long overdue national dialogue about institutional reform in public higher education. Bill Richardson is, as you may know, a distinguished scientist who presided over one of our most prestigious research institutions, The Johns Hopkins University, a university founded upon a commitment to the Germanic model of university research.

I think it is of special significance that an individual whose academic training and background is among the most traditional imaginable, and who presided over what many in American higher education consider a quintessential research university, is now advocating increased relevance of higher education to society.

In announcing the creation of the Kellogg Commission, he voiced this opinion:

... one of the critical challenges for higher education is to redirect our knowledge and resources in the service of rural communities and urban neighborhoods. In fact, it may be these investments that prove the true test and value of our research and outreach programs. Can we, for example, make a difference in the lives of people where they live ...? Can we build the capacity of people to play a central role in finding their own solutions? And, can we impact public policy that creates both economic and social opportunities for people to improve their quality of life?

It is both noteworthy and instructive that Dr. Richardson, with his extensive university experience, and the Kellogg Foundation with its long history of involvement with higher education, have concluded that it is vital that we give greater attention to the connections of the university to society.

We should note, however, that the national discussion is not new. In 1981, the late Ernest L. Boyer and Fred M. Hechinger noted in their book, *The Higher Learning in the Nation's Service*, that:

Higher Education in America is suffering from a loss of overall direction, a nagging feeling that it is no longer at the vital center of the nation's work.

Boyer followed that thought more specifically in his 1990 consideration of the professoriate when he wrote in his widely read and acclaimed work, *Scholarship Reconsidered*, that:

What we are faced with, today, is the need to clarify campus missions and relate the work of the academy more directly to the realities of contemporary society.

That Boyer seemed particularly prescient on the last point is illustrated by examples from studies recently conducted at several leading institutions. In 1993, the University of Minnesota published a strategic plan for Outreach which noted that:

America's public research universities have long played a productive role in society. From the beginning, their covenant with society has included a responsibility to generate knowledge through research, share knowledge through teaching, and apply knowledge through outreach. . . . Today more than ever before, research and education in public universities can be engines for societal growth.

In that same year, a Provost's Committee on University Outreach at Michigan State University soundly endorsed the Minnesota committee's view of the role of the research university. The Michigan group reasoned that:

Today the need for our University to adapt to the knowledge needs of a changing world is particularly challenging because society is undergoing rapid and fundamental transformation. This transformation requires higher education's active and creative involvement.

Similar studies have taken place at Clemson, Cornell, Oregon State, Iowa State and Wisconsin; and, in each case, the effort has been to define, structure, and embrace a university-wide outreach program so that, to paraphrase Nils Hasselmo, President of the University of Minnesota, the University can assert its franchise to lead and conduct significant programs of outreach for the citizens of the state.

In July 1994, Elizabeth Zinser, Chancellor of the Lexington campus of the University of Kentucky, summarized this national discussion:

[The] goal is to create stronger and more flexible bridges between the most pressing needs of modern society and the best knowledge and learning capabilities of land- grant and state universities.

Her very crisp view received national attention, and in November of 1995, Bryce Jordan, President Emeritus of Pennsylvania State University, addressed the NASULGC Annual meeting with these words:

Among most of us in the higher education community, there is today, I believe, a prevailing sense of crisis. . . . There is, I think, . . . a crisis of public confidence.

Whether or not public higher education faces a crisis of public confidence, we can all enumerate consequential changes in our society over the last half-century:

- the substantial post-war growth of the higher education enterprise -
- including great growth in the number of college-educated citizens,

- the growing demographic diversification of our population,
- “globalization” of industry and trade, economics, and politics
- the development and demands of a knowledge-based information society,
- the demise of the Cold War,
- the impacts of our activities upon our environment,
- and the growth and convergence of the telecommunications and computer industries.

And, as these changes have occurred, higher education has lost any monopoly that it may once have had with respect to research and information transference, and we can observe, in state after state, diminished support for the academy.

It is against this background of large-scale, rapid and turbulent change, of knowledgeable and informed suggestions that there is a mismatch between what society reasonably

*...higher education
has lost any monopoly that it
may once have had...*

expects and what we provide, that these presidents have concluded their best role in the best interests of their universities is to lead a re-examination of the relationships that exist between the academy and

the larger society and to inquire what these relationships, these connections, should be for the future. It is deep-seated concern for the future of the academy that leads us to ask you to join us in a fundamental discussion of the continued development of American public higher education.

Now, as to the second question, why is this relevant to Auburn? A sequence of recent events has led us to where we are today.

As you may recall, in my inaugural address as president of Auburn University, I called for a Twenty-first Century Commission to consider where we wanted to be in the coming century. That Commission recommended substantial development of our extension and outreach programs, and we have moved swiftly to implement that recommendation.

In a significant step, we adopted an organizational structure with a Provost to provide leadership for our instruction, research and outreach missions and provided for the position of Associate Provost and Vice President for University Outreach which was filled in January of 1995. Soon thereafter, we began a timely and, I think, noteworthy series of initiatives to investigate and develop the outreach mission at Auburn University. Some of these initiatives include:

- A statewide series of seven town meetings with citizens across Alabama during the Summer of 1995.
- The appointment of a University-wide committee, chaired by Dr. John Heilman to consider issues related to strategic planning for our outreach efforts.
- The appointment of a distinguished task force, chaired by University Professor Wayne Flynt, to determine how faculty participation in outreach activities can be properly recognized and rewarded.

- This lecture series here at Auburn which seeks to involve all stakeholders in a thorough examination of our outreach mission and to provide an opportunity for Auburn University to make a substantial contribution to the national discussion.

Our purpose in this series is to examine the role of universities, and particularly that of the land-grant university, with respect to their connections to contemporary and future society. We wish to ensure that you, the faculty and staff of Auburn University are fully involved in this vital discussion for the future well-being of our University. That these outstanding university presidents join with us underscores the significance of this topic.

With this background in mind, we can consider the third question: What is **university outreach** and why do we focus on it?

Within the circumstances in which public universities now find themselves, among them the impelling forces I enumerated above, President-Emeritus Bryce Jordan saw opportunity: “an opportunity to seek, find, and implement ways of better serving the society in which we live.” He offered “an idea whose time may have arrived”:

. . . two great university traditions have flourished in this country — the tradition of the research university and that of the land-grant university Is it possible that these two traditions might find still larger opportunities to serve our country and our people through new and innovative ways of cross-breeding?

In my inaugural address, I summarized the characteristics of the land-grant university, as it was based in our public law in 1862 and as it has been affected by subsequent legislation and institutional development. The land-grants were founded “to promote liberal and practical education of the industrial classes in the several pursuits and professions in life.” These land-grant institutions were later charged with a special obligation to conduct research of a practical nature and to help individuals understand and apply the results of that research through extension efforts.

In accord with these obligations, we, the land-grant universities, have admitted the children of America to our undergraduate programs, we have developed graduate and research programs relevant to the needs of society, and we have extended our teaching and research through the development of delivery systems such as cooperative extension, continuing education, technical assistance centers, and distance education. We have become “people’s universities.” Our history places us in a role of valued and valuable service to society.

The essence of our heritage is that we are attentive and responsive to the needs of the constituents we serve. As I have noted before, however, our responsiveness must not be constrained by a narrow definition of the land-grant mission; rather, we must inquire what it is that this institution should and must be, now and in the future, if we are to fulfill our role in service to society.

In August of 1993, our Twenty-first Century Commission recommended that, within available resources, we develop extension/outreach as a primary and visible mission of

Auburn University. We should provide a broad-based outreach effort emphasizing programs that:

- educate non-traditional students
- provide continuing professional education
- disseminate research findings
- transfer technology
- meet the diverse needs of Alabamians
- promote cultural enrichment and ethical behavior, and
- inform public policy.

There are countless illustrations of faculty, staff, and specialist activity that flesh out these categories of outreach. Many of you are involved in programs of continuing professional education for engineers, nurses, pharmacists, and elected public officials. Many of you have conducted research that has contributed to developments in agriculture, manufacturing, and public safety. Many of you have assisted business and industry in applying new knowledge and technology to their operations.

Many of you provide in-service education for the public school teachers of Alabama. Many of you participate in programs that provide cultural opportunities for our citizens. Many of you involve your students in projects that assist individuals and communities. Many of you contribute in other meaningful ways — ways that may not presently be recognized — to the solution of problems facing this state, region, and nation.

These examples provide us with a “feel” for outreach; our Committee on Strategic Planning for University Outreach has reviewed the developing literature and offered a more conceptual definition. But, before turning to that, let me clarify the relationship between **extension** and **outreach** and the implications that emerge.

The conventional description of an American university’s mission typically divides its activities into three components: teaching or instruction, research, and service. Different universities, based on their tradition, history and prescribed or self-defined role, place varying levels of emphasis on each of the elements in its tripartite focus.

Within the nation’s land-grant universities, the service role has been subsumed largely under the title of extension. In some cases, extension has been narrowly defined to include only cooperative extension, that network of offices in each county that is financed jointly or “cooperatively” by federal, state and local governmental agencies. Indeed, there are even those who would narrowly define cooperative extension as being concerned only with disciplines in agriculture and related sciences.

Fortunately, the definition of cooperative extension has broadened significantly over the last several decades to include a much wider range of academic disciplines and delivery to a considerably larger audience of recipients. Essentially, we should be identifying the many needs of the local communities we serve, and developing delivery mechanisms to disseminate information relevant to those needs in a manner readily or easily available to the potential users.

Just as importantly, the **concept** of extension has been extended beyond cooperative extension to involve all other units at the university. This, then, gives rise to the use of the term “outreach” to more accurately describe the public service role of the university.

Outreach includes all of those efforts designed to assist individuals, groups and organizations to obtain, understand and apply the information they need in order to be productive and useful citizens and effective organizations.

Outreach is truly a descriptive term for this process because it involves the university reaching out to identify issues and using its expertise to serve the needs of those constituents it can and should be assisting. The land-grant colleges were our first outreach universities, and they should remain our foremost centers for the dissemination and application of knowledge.

It seems to me the outreach function is the most distinctive attribute of land-grant universities. Virtually all universities are engaged in teaching and research, with the research dimension varying in importance among different types of institutions. The original extension function of the land-grant university made it unique and distinctive.

Over the last two or three decades, however, we have seen emerge a greater emphasis on extension or outreach by a wide variety of non-land-grant institutions. Major universities located in urban areas have

*...we should be identifying
the many needs of the
local communities we serve...*

developed extensive programs to reach out into their communities, using their students and faculty to provide a variety of services to a broad range of community groups, organizations and enterprises.

The U.S. Department of Commerce established small business development centers to assist commercial enterprises, utilizing expertise at the various business schools throughout the country. Law schools established legal aid clinics to provide advice to the indigent. Colleges of education have encouraged their faculty and students to work in a number of capacities with the public and private elementary and secondary schools. Engineering schools have formulated large industrial outreach programs to assist in modernizing the nation's production capacity.

In virtually every discipline, including the health sciences, institutions have undertaken meaningful working relationships with external audiences and organizations. Many universities in non-urban areas have also begun extensive outreach programs, particularly in areas of continuing education for the professions or for the general public. The degree that land-grant universities are distinctive today, because of their outreach mission, **is only by the scope and breadth of their involvement and not because of the uniqueness of this activity.**

I am concerned today that land-grant universities not only may have lost their distinctiveness, but may be in danger also of losing their competitive edge when it comes to the outreach function. The outreach function is viewed by many as a growth opportunity, and other universities are being far more aggressive and ingenious in seeking out and serving the needs of constituents beyond the campus.

How do the land-grant universities, those institutions created specifically with a mission to serve the needs of those outside the institution, keep from losing this distinctive competitive edge or comparative advantage to younger, more aggressive institutions that

are zealously trying to fill that niche? In a word, there needs to be a clarion wake-up call. We have to rediscover our outreach heritage, reevaluate our potential for service, and renew our commitment to that part of our mission. We must learn how to perform this role in new and more creative ways, and, more importantly, we must recognize, appreciate and proclaim its importance.

It is clear to anyone who studies American universities that we value most highly the discovery of knowledge through research. Next, we value the dissemination of that knowledge through the teaching function. We seem to value least the application of that knowledge.

In many other kinds of organizations the priority order is reversed. These organizations value most the individual who not only knows the answer and can tell other people about it but who can apply it; i.e., the person who can and does get the job done. Educational institutions are primarily focused upon the discovery of knowledge and the dissemination of ideas, but it is only through the application of these ideas that value is created for our society and for individual citizens. Hence, it makes sense to me that we ought to place greater value than we do on the application function within the learning process, and that we should recognize and reward those individuals who are particularly adept at helping others to use the knowledge that has been created to solve society's problems.

How do we do that? First of all, I think it is important to recognize and accept that every academic unit within a land-grant university has an outreach responsibility. Each department should carefully define who are the potential users of the knowledge available in that discipline. Each unit should identify what kinds of individuals, groups and organizations can effectively utilize or apply the knowledge that currently exists and the new discoveries that are emerging.

There should follow a mechanism that would encourage communication with representatives of the constituencies served, in order to provide feedback about the usefulness of the information provided. Furthermore, the application of the information should be an integral part of the educational process. This can occur through cooperative education and internships for students, and through actual problem-solving cases as a part of many courses. There could and should be, wherever possible, active movement of faculty from practitioner to teacher and vice versa. In this manner the applicability and relevance of new knowledge are assured, and the larger community's problems are better understood by faculty and student.

I believe that the most successful universities in the 21st Century will be those that not only are effectively discovering knowledge but those that have the capability of working with potential users to apply that knowledge in timely and effective ways. An increasing amount of the research conducted in the 21st Century will be financed by corporations and trade associations that have a vested interest in information that will assist them in solving existing problems or in discovering new and profitable opportunities.

Two current examples of such arrangements at Auburn are the National Center for Asphalt Technology and the National Textile Center. The NCAT is the research arm for the asphalt industry, financed by contributions from the members of that trade associa-

tion. The National Textile Center is a consortium of four universities that are doing research on the needs of the textile industry in the United States and are working with the various textile companies to apply the results of these research efforts.

I believe that these centers are models of research and application units that will increasingly develop in higher education. Those institutions that can adapt to this environment and are willing to work hand-in-hand with the users of research information will be sought-after partners in this new educational paradigm. This model places value and emphasis on the utility and applicability of knowledge: the creation, dissemination, and application of information.

In order for Outreach to occupy this leadership role and to be accepted as an equal partner in the university's tripartite mission, we have to think of the application function in different and more creative ways, and we have to design effective mechanisms to measure performance in that area.

The most significant innovation in the application process is the exploding technological revolution, which is revolutionizing our abilities to generate, collect, store, and disseminate information. We are rapidly developing the capacity to share this information instantaneously with anyone, anyplace, anytime. I believe this technology could change, markedly, how universities operate in the future, and it will have impact particularly on the outreach area.

For example, I can conceive of a future in which cooperative extension would have eliminated all or most of its county offices. In their places would be a series of electronic networks tying together the information source and those clients who are interested in that information. These networks might be accompanied by a consulting service that could dispatch experts to sites where individualized assistance is needed and/or a continuing education unit that offers seminars and conferences on matters of timely concern.

***...every academic unit within
a land-grant university has
an outreach responsibility.***

A similar outreach model might be adopted for all academic units, including those not involved in cooperative extension. And it is conceivable that the clients of these outreach networks might be assessed fees for the information they receive and the assistance they obtain at rates at least equal to the cost incurred by the networks.

The evaluation of outreach work is difficult, but essential, for full acceptance of those who toil in this vineyard. I am convinced that research is accorded so much weight in the academic world because it is much easier to measure — or at least we have devised readily-accepted venues for assigning value. Journals are ranked as to their prestige (largely based on their selectivity) and articles accepted for publication through this peer-review process receive clearly understood currency within a discipline.

By contrast, teaching does not have similarly well-developed and universally accepted peer-review processes. As a result, while teaching may directly impact far more individuals and account for a greater share of the university's budget -- particularly that share funded by the state -- it is likely to occupy less attention in the faculty members' focus and less weight in the reward process of promotion and tenure decisions.

Outreach, is in an even less well-developed state. There are few instruments for assessing performance of outreach activities, and limited amounts of qualitative input are collected. As a result, personnel whose full-time assignment is in the outreach area and those faculty who devote a significant portion of their workload to outreach are often at a disadvantage when their performance is evaluated in the campus culture by traditional means and by traditional faculty through promotion and tenure committees.

There must be a better way to evaluate outreach activities. I believe that those involved in the outreach function must define more clearly the goals for each activity. These goals must include more than counting the number of clients served, although the identification and quantification of the recipients of the information or service provided is an essential first step. The process should include an evaluation by the recipients of the usefulness of the information or service received. In an ideal world, we could look at the impact that the information or advice had on the success of the client. Getting a handle on the volume, quality and impact of the outreach output is critical for gaining equity in the evaluation process and the reward and recognition system.

As I earlier noted there are initiatives underway here at Auburn to address these hard questions. As a first step, the University Outreach Strategic Planning Committee has provided us with a definition of outreach:

Conceptually, outreach is instruction, or research, or instruction-and-research that is applied to the direct benefit of external audiences and that is directly relevant to the mission of the units in which the contributing faculty and staff members work.

With this definition in mind and with a developing sense of the importance being attached to outreach nationally and of the potential loss of our distinctiveness, we can consider the final two questions: why do we address this series to you, the faculty, and what does outreach have to do with Auburn's future? These are scarcely separate questions.

The work of the Twenty-first Century Commission is particularly germane to our answer. The commission reasoned that if outreach is to become an important part of Auburn's mission, our academic departments, colleges, and schools must play a major role. We must find ways for the faculty to contribute. Among other things, increasing faculty outreach activity will require leadership, supporting infrastructure, and a faculty reward system that recognizes excellence in contributions to the outreach mission.

How can Auburn's commitment to outreach be effected? We have signaled a direction by designating our main outreach officer as the Associate Provost and Vice President for University Outreach, and by choosing, if you will, to move beyond Extension to University Outreach.

Having done so, we then need to more directly involve the schools and colleges in the outreach program. As an initial step, with the advice and consent of the Deans, a University Outreach Council was formed to assist the Vice President with counsel and advice and to provide an important element of school and college infrastructure.

At the heart of this Council are representatives of each School and College. Each representative is nominated by the Dean and usually serves as associate or assistant dean

within the College. In conjunction with the Dean, each serves to provide leadership for the outreach effort within the College.

This Council is a vital component of our effort to develop a modern, University-wide Outreach program. It provides for communication, coordination, and collaborations across the University. From it are drawn core groups to form committees and task forces that address important issues related to outreach and the future of the University. In conjunction with the Senate and the Administration, members of the faculty are identified to serve as members or to chair these Committees. Presently there are two such groups whose work is exceedingly important to each member of the University faculty.

***...outreach work should
receive consideration in the
promotion and tenure process.***

One is the Committee on Strategic Planning for University Outreach. This committee, whose report is in final draft, was most ably chaired by

Dr. John Heilman. It is of more than passing interest that, having studied Outreach in this University and nationally, this committee recommended a series such as the one we inaugurate today to promote a campus-wide consideration of our Outreach mission and an understanding of the initiatives that are underway.

Language from the draft report of that committee provides an indication of how our work at Auburn parallels, in some degree, work that is on-going across the nation. With respect to our efforts to develop our University outreach program, the committee concluded:

The time is right for this undertaking; societal forces increasingly compel the university to be responsive and accountable to the society that sustains it. The methods and mission of outreach are well-suited to addressing this challenge. Outreach involves the application of instruction and research to the needs of, and for the direct benefit of, audiences external to the university. It goes well beyond the framework of cooperative extension to include many forms of continuing and distance education, education for non-traditional students, and technical assistance.

This committee has addressed issues fundamental to the faculty and has endorsed recommendations that merit your fullest consideration. Among them is one that asserts that faculty participation in mission-related university outreach work should receive consideration in the promotion and tenure process.

With respect to this matter of recognition and reward, a second committee, chaired by University Professor Wayne Flynt, has accepted a charge to recommend a model for Auburn whereby faculty participation in outreach can be reliably assessed for use in promotion, tenure, and salary decisions. Professor Flynt is joined on this committee by several of our distinguished and titled professors.

These committee and commission initiatives are certainly significant for our outreach program, yet we must understand that they have been campus-based undertakings. It

is equally, and some would argue, more important, that we engage our external constituents in our discussions.

In the Summer of 1995, we took an unprecedented tour about the state to present the current face of University outreach and extension to the people of Alabama and to solicit their views about problems and concerns that we might assist them with by applying the knowledge resources of Auburn University. We held town meetings in Demopolis, Tuscaloosa, Athens, Anniston, Bay Minette, Enterprise, and Montgomery.

*...the land-grant university,
at its best, is characterized by
its service to the people...*

As the provost, the vice presidents, the deans, faculty members and I traveled across the state holding these meetings we encountered first-hand, and some of us might say, **up close and personal**, two strong and clear findings. First, there is a large and deep affection for this university throughout the state.

Second, we are considered a university of the people; we are considered **their** university and they **unequivocally** wish our help with many matters of concern to them. While their views of us are tempered by their long association with traditional **extension**, it is clear they need and desire us to apply the full range of our resources to local problems.

Now, to look to our future, the Outreach Strategic Planning committee has provided us with a statement of vision that I commend to you for careful review:

The committee's vision of outreach consists of a thriving partnership between university faculty, staff, and students, on the one hand, and the people and communities of Alabama and beyond on the other. In this vision, people and their communities routinely make effective use of the knowledge resources of Auburn to serve their needs and help them solve their problems and improve the quality of their lives. The providers of those resources with the university, especially the faculty, routinely and confidently commit portions of their time and expertise to outreach, secure in the knowledge that their work will be reliably assessed and rewarded within their own institution and within the broader academy. The university acts not only to maintain effective and efficient connections with established constituencies, but also to discover emerging constituencies and cultivate appropriate connections to them.

The basic value that has run through this discussion today is that the land-grant university, at its best, is characterized by its service to the people, by its meaningful connections to society that work for the amelioration of real problems, and by an unwavering belief that the benefits of higher education should flow freely throughout the land. In this lies our distinctiveness. Yet, our once unchallenged claim to this domain is threatened; we must respond innovatively, creatively, and with great vigor.

When public institutions lose their connectedness to the people, it is only a short step to an aloofness that encourages self-absorption and that discourages public support.

When we develop mission-based connections that result in real impact on real problems, we contribute to the welfare not only of our society, but also to our own. As members of the academy, we come to a greater, more intimate and rewarding understanding of the contributions that our scholarship can make to human progress. This is the course we must follow in faithfulness to our past and with confidence in our future. This is the course that will insure our distinctiveness.

The challenges ahead are significant but exciting. It is my hope and expectation that Auburn will be in the forefront of this important thrust. We will need your guidance, wisdom, and support on each step of the way.



OUTREACH AND UNIVERSITY ACCOUNTABILITY

Peter McPherson

I have been asked to talk about outreach: to say something about what we are doing at Michigan State and to offer some thoughts as to what you might do here. I will not be so presumptuous as to tell you exactly what you should do because circumstances do vary, and you know your situation much better than I do. Nevertheless, I think there are some broad concepts that may be applicable.

First, it seems very clear to me that we are in an era when the public is demanding more accountability from universities. This concern with accountability is not short-term. Governmental resources are going to be tight for some time as a result of public pressure that, I think, will be sustained. It is also true that the public's perception is that the cost of higher education has gone up dramatically. I know you have some special situations here at Auburn and that you are trying to work with severe budget cuts, but generally the public view is, and the facts are, that higher education costs have gone up substantially in many parts of the country. One need only look at a recent *Newsweek* cover article that shows public education costs going up 40-50% above inflation in the last decade and private education costs increasing much more.

It is also true that, over the last forty years, those institutions we call Research I's (and all the others that are heavily focused on research) are simply operating differently than they once did. In these universities, such as mine and yours, a significant portion of the faculty's time is allocated to research. By and large, the faculty decide what they will do with this time: what research they will undertake and what time they will devote to it. Part of the rise in costs and the public's questions about accountability stem from this emphasis on research.

I, for one, think that the research component of our faculty's time is critical. Our research universities comprise one of this country's major assets; we need to maintain the vitality and originality that are inherent in our research programs. On the other hand, we must understand that there is probably no other part of American society in which individuals are basically able to decide what they're going to do without any direct accountability to the public — and people are questioning the university's involvement in research as they never have before, partly because this system is largely a post-World War II system.

We are pressured to be accountable, and we can't simply say, "Well this is the way it is; this is the academy, and we are just not going to respond." In my judgment that response just won't work anymore. It certainly won't work in Michigan, and I doubt whether it will work here in Alabama or in other parts of the country. Actually, I don't think it should.

I think that we in the academy, like everybody else, have to understand that we are paid to perform certain functions, and it is reasonable to expect that those who provide us resources, whether they be students or the legislature or donors -- will expect that we deliver. Thus, I would argue that to protect this wonderful resource that we have, the freedom we have been given and the vitality that we have developed, we must figure out (at least to some extent in our own terms) how we are going to deliver.

In that context, we need to look at our faculty and the allocations of faculty time. It is often said that the faculty is the university. In a fundamental sense that is true. If the faculty of Auburn was to walk out tomorrow morning and a new group of individuals was to come in, what a different university it would be. In fact, it might be dramatically weaker and not have nearly the strength that Auburn has now.

So, in many ways the faculty is this university and is my university. But as a public administrator, I must phrase it a little differently: the most valuable asset of the university is faculty time. As a chief executive I must be deeply concerned about how that asset is used. Now, I do not want to tell faculty members what to research or how to teach.

***...the most valuable asset
of the university
is faculty time.***

Frankly, I don't think that even if it were a good thing to do that administrators can be wise enough to do that from the top.

At Michigan State, we had college-by-college discussions about teaching

loads, and we agreed that every academic unit would have an average teaching load of two courses plus seven hours in the classroom. Within the average load, of course, there will be differential teaching loads among the faculty of a department, given differing needs for research and other assignments.

This difference is appropriate because in a lifetime career in academics there are times when more research needs to be done and so on. But, we clearly want all our faculty members to demonstrably contribute to the teaching of undergraduates or to have a large number of undergraduates involved in the research conducted by the faculty. We had a substantial discussion on campus about these issues, but through it we came to a collective agreement.

Our faculty is now expected to devote 40-50% of their time to research. We also need to think carefully about the impact of that research. Quantity and quality of research are important, but impact is very important too. We are not telling professors what they should research, but we are saying that we need a way to explain that research to the public. When I talk to legislators, to the governor, and when I talk publicly, I usually need to be able to talk about impact. Impact may not always be direct; almost certainly it will

not be in many cases since sometimes our research is basic, or ahead of its time and a little off the beaten track. But, we are saying there needs to be an impact eventually.

Lastly, and most pertinent to today's topic, we have historically and somewhat reluctantly said that 10% or so of a faculty's time was going to be for outreach. And that time too, in our judgment, we need to be able to measure. In fact, we probably would want to measure the outreach component more concretely than we would the research. What is that outreach component? First of all, it includes distance education. As a land-grant university like Auburn, we are deeply committed to providing access for the people in our state to the knowledge we have. We have really worked hard to increase our off-campus courses over the last two years; indeed, this fall we will double the student credit hours that we deliver around the state.

We are teaching approximately 22 master's programs at these off-campus sites. In the spring some master's programs will, in fact, produce their first graduates. A good share of this teaching is by interactive TV.

We have been exploring other distance education options because, frankly, we are not reaching enough people or meeting the need that, in our judgment, exists in our state. We haven't done a survey, but some other states show three-quarters or so of employed persons think they will need more education simply to continue to function in their present jobs. As we struggle to think about meeting such need, we've come up with a number of ideas.

We offer a weekend MBA. Lansing, Michigan, is a community without a large population, and there probably aren't enough local people to sustain a part-time evening MBA. In our weekend program, students come in every other weekend, some from 100 miles or so. To participate in the program, students have to have been out of school for five years, they have to have an employer sponsorship, and they are issued a computer to link them to the campus. It is a very intensive seventeen month program covering two summers, two weeks of which are on campus.

I am convinced this weekend MBA program is going to be every bit as strong, if not stronger, than our full-time MBA program. Indeed, there are a range of ways to think about meeting educational needs of off-campus students through distance education. We are at a stage where there will be a quantum leap, if you will, in how educational programs are delivered.

The virtual university that has been discussed for sometime is upon us. At Michigan State, we offer "virtual" university courses. We know there will be an explosion of opportunity here, and not just for Michigan students. I think that we will develop joint ventures with out-of-state universities, and that we will enter into additional relationships with the private sector -- with communications companies and others.

Universities that are imaginative are going to do some exciting things in distance education. I can tell you with certainty that we will look for relationships in which we lease courses from other universities and they lease courses from us. Courseware can cost \$25,000 to \$50,000 per course at a minimum. While there are a number of financial issues involved here, we must have a high quality program that equals in intensity and

quality what we are delivering on our campuses. The developing technology will allow us to do that. So, distance education is a growing part of our outreach effort.

But outreach, of course, includes many other things, including the traditional role of cooperative extension. At Michigan State, we split our extension budget so that about 50% goes for production agriculture and about 50% for other areas. I'm committed to those figures (you can imagine they occasionally get a little political) because we at Michigan State are essentially the research arm of the state for agricultural and environmental issues. We do this well, and we're proud to do it. I grew up on a Michigan farm,

***...people can be catalysts
instead of just
direct service providers.***

I know this part of the business fairly well, and I'm committed to our agricultural mission. I presume you here at Auburn have a similar commitment to traditional extension.

In Michigan, production agriculture overwhelmingly takes place on large growing farms that are very complex enterprises. The owners of these enterprises don't need to talk to a traditional agriculture extension agent; they want to go to a faculty member for the newest answers about apple trees or beef production. However, we have a larger group of farmers whose total production is much less than that of these enterprises. Many are essentially part-time farmers with at least one member of the family earning income off the farm. One of our concerns is how and to what extent we should be serving these folks.

In Alabama you have a set of issues that you know better than I do concerning disadvantaged people who are still on the farm and, in many cases earning substantial portions of their income from the farm. No doubt you have somewhat different dynamics here. The non-production agriculture component of extension is one that we, like almost everybody else, struggles with; and we do some wonderful work. I've met with the extension folks who are working with unwed mothers in Detroit and figuring out how to get them to take care of themselves and their babies when the babies are born. They do some really interesting good things.

The issue in this area of outreach with which we are struggling now and will be for a long time is how our extension people can be catalysts instead of just direct service providers. If we're simply providing an ongoing service as opposed to being agents of change and helping to bring communities together, we are probably not the least expensive quality provider. Our 50% of non-production agriculture extension occurs predominantly in our cities, for certainly at this juncture, we are a populous, urban state. This brings us to that area of outreach that is hardest to figure out.

As we've discussed, we are pretty clear about two aspects of outreach: distance education and traditional involvement with production agriculture. We are less clear about ways in which the agriculture model can be adapted and applied to other parts of the university. The agriculture model has been an integral part of producing one of the most profitable and efficient industries in this country. Now we need to ask how we can do a better job in the non-agricultural areas. Although both Michigan State and Auburn have done some things, we've been a little long on promise and short on delivery in this area.

It isn't that we haven't tried, but there are a series of issues that I believe we all have to grapple with as we try to extend our outreach efforts.

First of all we need to ask what outreach work we want the faculty to do, and what work they want to do. Second, once we've defined those things, we need to find out what kind of motivation there is. How do the faculty get engaged and excited about this? To me those are the core issues. They're related obviously, but let me first talk about what work, what outreach we would look to the faculty to do, remembering that faculty time is our most valuable asset. I don't think we want the faculty essentially to deliver services. You wouldn't want the faculty member in early education spending a significant portion of his/her time teaching in an elementary school, doing teaching only. You wouldn't want the social work faculty member to be delivering social work services. Local social service agencies are probably in a better position to provide the on-going delivery of services more cheaply.

What I think you want and what we've been able to do more of at Michigan State is to have the faculty help structure new programs. They do not to operate the programs but they advise, and very often they evaluate.

Our faculty are involved with K-12 improvement programs, with delivering food stamps, with family or children's programs, and with health. We've been deeply involved with several major hospitals and medical delivery systems in our state.

To illustrate, we go into Flint, a community of 300,000 people north of Detroit that has had many problems in recent decades. We have gone to the hospitals, to health delivery, to the school system, and we've gone to the major community family and child service systems. We (the pertinent faculty -- the medical school or the social science programs in various parts of the university) sat down with members of the Flint community and we've worked with them. We've asked the community agencies what they want, what they need to facilitate their programs. Sometimes we've said we could help and sometimes we've said we couldn't help, but usually we've worked out a very concrete understanding of what we could do within a certain time frame and how we would evaluate the effort. Then, everybody has to put resources on the table. We bring our faculty time, but the community has to put in resources, too, so that everyone knows it's a serious project.

To facilitate such arrangements, there has to be good communication between the parties. We've been experimenting with what we call "translators," people who have a real academic background but who have also done a lot of work in the community. These people have really been helpful in bringing together agreements and keeping the agreements honest. Of course, sometimes the agreements don't work out, and we ought to walk away or they ought to walk away.

The point of our method is that it plays to the strength of the faculty; it involves the academic rigor of a good evaluation, the application of expert knowledge and methods to structure new programs. As faculty members deal with problems in this manner, the curriculum is re-invigorated because faculty acquire new experiences around the state and then come back to teach their courses.

These arrangements are certainly an adaptation of the agriculture model, and they clearly give faculty an opportunity to do new things, to apply their research expertise so that it has more public impact. We also often expect publications out of these works and, therefore, it's appealing to faculty. What we are saying is that the hard job, our faculty's function, is to provide expert knowledge across the university mission. In other words, we expect academic rigor in the curriculum, in research, and in outreach. Thus outreach isn't some sort of secondary, non-intellectual activity. Indeed, if it is going to be a comparative advantage for us to deliver it, outreach must have academic rigor.

So you get questions like, "Do you really want to give credit for outreach in tenure decisions or salary decisions?" I would say "yes," providing that the outreach is an application of knowledge across the mission where real academic rigor is applied to the outreach function.

These outreach issues we have discussed are, in my judgment, very important for our institutions. Let me just summarize. I think that the academy is being pressed to be accountable as they haven't been for a couple of generations. I think this accountability is going to mean some changes in how we work. I think that we will be stronger, academically and financially if we can carry this

***...we expect academic rigor
in the curriculum, in research,
and in outreach.***

off. To do so, we are going to have to be fleetier afoot than we are accustomed to being, but I have every confidence that we can be.

I believe that this whole distance education area is one of the most exciting things that could happen to us in higher education, and those who play in it are going to find that they become much stronger institutions because they do. I think traditional extension is changing some, and there are many tough issues, tougher politically than they are substantively. I think we certainly know how to approach the political aspect of outreach, but I am not sure we will be able to pull it off both in the legislature and with our own extension folks. I am committed to continuing to deliver our agriculture component in the state of Michigan, but I think there are some other things that we need to do as well.

The fuzziest thing in my mind about outreach lies in what I call the non-course outreach area, where we are beginning to see how we can have significant components of the university deliver outreach in ways that will truly help the people of our states and will build solid goodwill votes in the legislature and, most importantly, that will be true to our historical mandate. When you think about what's happened in land-grant universities over the generations and that in 1862 universities generally were not responsive to people, except those who were economically favored, we find that we have put into place a land-grant university system that, in many ways, is the envy of the rest of the academy in this country and the world. Today we've got a new set of challenges, but I think we've also got a new set of tools, conceptual and technical, with which to meet those challenges.



BEYOND CAMPUS BORDERS

John V. Byrne

First, let me say that I probably would not have chosen for an outreach symposium the title “University Outreach: University Connections to Society”. I might have chosen something like “Beyond Traditional Borders: Education for Tomorrow’s World”; or “Tomorrow’s Land-Grant University: Doing the Right Things in Different Ways”; or “The Research University’s Third Mission: Extended Education Outreach (or whatever you choose to call it)”; or even “Learning Beyond Campus Borders”; or how about “The Demise of Continuing Education: Education for Everywhere, for Everyone, All of the Time, Anywhere”. Obviously what I want to talk about are things that are important to you as members of a Land-Grant University.

I want to congratulate you and President Muse for the progress you’re making in reaching learners wherever they may be and particularly for setting up this Presidential Symposium on the Land-Grant University and Contemporary Society. I think you’re on the right track. But, I would remind you that Will Rogers, that 1930s humorist-philosopher, once said: “Even if you’re on the right track, if you’re not moving you’re likely to be run over”. From all I see, I think you’ll keep moving and the danger of being run over is very, very small.

I want to share with you some thoughts on a number of topics. First, on the whole issue and general nature of change; then on higher education and its publics and their perception of higher education today. I will share a few words with you about the Kellogg Commission and what it is we are trying to do. And finally, I want to recount for you some personal experiences concerning the matter of changing a campus culture. Specifically, I’ll tell you of the Oregon State University experience in transforming Extension and Extended Education and some of the lessons we learned in doing it.

It is important to talk about change from time to time, to think about it in general ways, because it represents the world we live in and the world that we’re moving into. Much of what we might say about change is not new. For example, let me share with you the content of a couple of cartoons that appeared in the *New Yorker*, the first of which appeared almost sixty years ago in 1937, drawn by the cartoonist George Price. The cartoon featured four runners lunging for the tape and two individuals in street dress, also running. The caption said, “We’ve decided to make it two hundred yards”. It’s the type of cartoon that is not terribly funny, perhaps because it is so close to home.

All too often the rules of the game are changed during the game, and often by those who are not participants. The cartoon, of course, reflects organized or intentional change created by people who are really not involved in doing the job or by forces that do not directly involve us, but certainly involve us indirectly. One thing to point out is that one of those four runners will adjust to the change better than the other three and will win the race.

The second cartoon appeared almost seventy years ago in the *New Yorker* magazine in 1927. It was drawn by the cartoonist Gluyas Williams and is entitled, "Industrial Crisis". It featured a pool or tank of some sort in which there are ripples in the center indicating that something has just disappeared from the surface. Surrounding the pool are people

...crises do produce change.

in various stages of response - some in despair and some recognizing the threat and making preparation for taking on the challenge of responding to this crisis. The sub-title is, "The day a cake of soap sank at

Proctor & Gamble's". I now find it is often necessary to point out for younger audiences that the slogan of Ivory Soap was "99 and 44/100% pure - it floats." Life seems to be one crisis after another. It is not so much the nature of the crisis but how we cope with it that matters. Of course, crises do produce change. Proctor & Gamble now has produced Ivory soap that does not float; in fact, they've even produced Ivory Liquid soap.

The increase of some activity or process or product with "time" can be graphically shown as a curve. This can be a curve of world population growth, of personal computers in the state of Alabama, or just about anything that increases over time. The importance of this curve, which represents change, is that at any point on the curve the experience an individual has had reflects less change than the change that individual will encounter in the future. For many whose standards were set during a time when the curve was flatter, stability may have been the norm and change the anomaly, but as we look to the future, change becomes the norm and stability the anomaly. I frequently wonder how long it will be before we stop talking about change, because the process of transformation will be so commonplace that it will be the norm, the expected. The whole concept of change is one that is important to us as educators because it's our role to prepare students of whatever age for a world in which change will be more and more common, more and more dramatic, more and more the norm.

As we look to the world around us, it becomes obvious that change is ever with us. It would be nice to be able to predict and project what future changes will be. Some say predicting the future is easy; they're both right and wrong. Hodgkinson, a well-known educational demographer of today, indicates that frequently we can predict short-term trends because, "the tracks of tomorrow lie in the sands of today." By observing carefully the trends and activities taking place today, we can project reasonably accurately a short time into the future.

The world today has a population of about 5 and 1/2 billion people, projected to increase, to perhaps double in the next fifty to sixty years. We can imagine the effects

this world population increase will have on almost everything meaningful to us: overcrowding, resource depletion, hunger, starvation, disease, and possible pollution.

All around us incredible social changes are taking place: increases in ethnic diversity; the aging of our population; the movement of that population from urban to rural, and back to urban or suburban settings; a change in lifestyles; single parent families; two-worker families and the impact these changes have on the youth of today. We see political restructuring: the collapse of the Soviet Union; the potential collapse, perhaps, of communism in general; the ethnic turmoil that seems to be taking place as we see the demise of strong national sovereignty in so many different countries. And, of course, there are the threats of change and those that are taking place all about us in terms of the health of our own planet: pollution, threats to bio-diversity, and climatic change.

There is change in the world economy as we move from national companies to multinational companies and to consortia of companies; we are shifting from a domestic economy to a global economy. The technological explosion that is bringing us into the information age has often been described as the equivalent of moving from the hunting-gathering society to the agricultural society. The knowledge explosion is now part of our daily life with the transmission of knowledge being possible at the speed of light — literally — the speed of light, instantly. All about us we see devices for instant communication with others: cellular phones, pagers, faxes, personal digital assistants, talking computers, and the Internet.

Considering all of these changes, as we must do as educators, we find they are mind-boggling for society and certainly for the individual. The transition from stability, in whatever context, to constantly increasing rates of change will be daunting, perhaps even chaotic. Success, by almost any measure, will depend on our ability to adapt to the concept of change as the norm and to face the specific transitions that go with that change. The impact on individual learning is almost unimaginable, and yet we must not permit it to be unimaginable because it is our charge, our role in society, to constantly prepare the learner for those kinds of changes. As Molly Broad, the Executive Vice Chancellor of the California State University System, said at a recent meeting, “As we in higher education face these changes, we must be prepared to do the unthinkable. Pre-occupation with tradition will often result in new players moving into our area, and they don’t have the encumbrance of tradition.”

As public universities, as Land-Grant universities, we are responsible to a great many stakeholders, a great many publics: our students, their parents, the legislators who have some say in how well we’re funded to carry out our charge, the public in general. What do they think of us?

Not long ago, the American Council on Education contracted for a study by James Harvey and Associates to find out what the public did think of us. This resulted in three reports: “Good Will and Growing Worry: Public Perceptions of American Higher Education”¹; “First Impressions and Second Thoughts: Public Support for Higher Education”²; and “The Fragile Coalition: Public Support for Higher Education in the

1. Harvey, James and Immerwahr, John 1995. *Goodwill and Growing Worry: Public Perceptions of American Higher Education*, a report for the American Council on Education, Washington, D.C., pp. 38.

2. Harvey, James and associates, 1994. *First Impressions and Second Thoughts: Public Support for Higher Education*, a Report for the American Council on Education, Washington, D.C., pp. 29.

1990's"³. These were all published in 1994 and 1995. The first of these reflects an analysis of thirty polls which had already been taken. The analysis is summed up in six propositions:

1. American Higher Education enjoys a huge reservoir of public good will (93% of Americans believe university research makes important national contributions; 91% think that one of the important things colleges and universities do is help produce contributing members of society; and 87% agree that colleges help make America more competitive).
2. A college degree is thought to be as essential to a young person starting out in life today as a high school diploma was yesterday.
3. The American people support access and equity for all needy students as functions of income.
4. People are worried that college sports are out of control.
5. The public is shocked at the cost of financing a college education.
6. Growing worry about cost is accompanied by growing interest in government solution.

The second report was based on focus groups that met in four cities: San Antonio, Texas; Cherry Hill, New Jersey; Detroit, Michigan; and Memphis, Tennessee. There were actually eight focus groups, two for each of the four cities. About fifty people participated in the focus groups. In spite of the fact that a glance at journals and newspa-

The general public... is worried about access to higher education and how to pay for it.

pers covering higher education or at the reading lists and journals of opinion makers suggests that higher education is troubled, the view of the average person on main street was positive with respect to the

importance and quality of education. Even so, there were major concerns about higher education, but the concerns focus not so much on the campus itself, as how to gain entry and stay there. The general public, like the experts and professionals, is worried about access to higher education and how to pay for it. In general, the focus groups supported the six conclusions drawn from the surveys analyzed for the first report.

The third report reflects the views of community leaders from the same four cities, leaders that included city council members, mayors, Fortune 500 executives, small business owners, school superintendents, medical center administrators, manufacturers, journalists, bankers, managers of local media outlets, and so on. Their view was quite different. These, the decision makers and decision influencers, were critical of higher education. These people, who know a significant amount about higher education and support its goals, are extremely critical of how higher education implements its mission and pursues its goals.

To quote from the report: "While the public views a degree as sufficient for success, these leaders stress that a college education is necessary, but not sufficient. Leaders are much more concerned with the higher level analytical and problem solving skills that col-

3. Harvey, James and Immerwahr, John, 1995, *The Fragile Coalition: Public Support for Higher Education in the 1990's*, a Report for the American Council on Education, Washington, D.C., pp. 46.

lege is traditionally thought to instill. For them, theoretical knowledge does not necessarily compete with practical knowledge. What they seek are graduates who can see both the big picture, and beneath the surface, the particulars and cross currents that go into the big picture. Unlike members of the general public, leaders invariably stress the importance of general education and the value of courses in such areas as history, philosophy, and literature, both as an aid to thinking and as a means to enhancing the quality of life. Although they have many complimentary things to say about higher education, they are also persistently critical.” The issues they expressed concern about included:

- the declining quality of graduates, whether at the baccalaureate, graduate or professional level;
- the decaying utility and value of university research;
- low faculty productivity and the counter-productivity of tenure;
- the mishandling of issues of race and gender;
- rising tuition costs;
- poor organization and general mismanagement;
- higher education’s financial problems.

The Harvey reports point to several significant implications to be drawn from this review:

- leaders perceive that the academy’s monopoly on knowledge has been broken;
- community leaders want a more accountable system;
- higher education will be challenged to restore its historic leadership role in advancing social justice;
- financial pressures on higher education are likely to increase;
- historic roles have been reversed;
- a fragile coalition of support for higher education exists, oriented around “people need,” not academic preferences;
- fending off regulatory intrusion will require nurturing that fragile coalition.

Those implications, of course, are based on the perceptions drawn from the focus groups. But it is important for us to remember that perception can become reality and when that happens, it is generally a result of inadequate communication or education of the people holding those perceptions. Perceptions are important. But we must remember they are perceptions and can be changed even if it will take a great deal of sophisticated attention to bring about those changes.

The challenges of change, the pressures on our institution, and the perceptions of our publics all contributed to the creation of the Kellogg Commission on the Future of State and Land Grant Universities. Recognition that we can do our jobs in a better way, a more effective way, resulted in the creation of the Kellogg Commission.

Several years ago, the Kellogg Foundation created an initiative to focus on 21st-century education for careers and professions in food systems. The Food Systems Professional Education Initiative includes twelve Land-Grant institutions that receive funding from

the Kellogg Foundation to focus on how higher education might address the whole matter of education for professions in food systems in a modern and visionary way. By selecting food systems, the Kellogg Foundation picked a program that had an impact on a variety of different academic areas: agriculture, food processing, transportation systems, nutrition, social anthropology, psychology, and so on. The goal was to create for the 21st century a fundamentally different system of education.

This program came to the attention of Peter Magrath, president of the National Association of State Universities and Land-Grant Colleges (NASULGC), who felt that perhaps we should explore the possibilities of doing for the entire university what the Food Systems Professional Education Initiative was doing for those areas directly involved with food systems. Magrath submitted a proposal to the Kellogg Foundation; it was enthusiastically adopted, and the Kellogg Commission was under way.

Building on the initial twelve institutions, the presidents of an additional eleven institutions or systems were brought together with the first twelve to create the Kellogg Commission. The other institutions represented some of the 1890 Land-Grant institutions as well as some of the so-called “urban grant” institutions.

Recognizing that higher education was under attack from a variety of different sectors, the leadership of the commission developed an initial statement to the commission members, which included the following:

Today it is no secret that our colleges and universities are beset by an array of problems new to most of us: chronic shortages of funds, coupled with increasing costs and public resistance to higher taxes; new skepticism from members of the attentive public about our productivity, accompanied by hard questions about research and tenure; an academic culture that appears to measure excellence by scholarly citations and the number of doctoral candidates, not minds opened or the needs of undergraduates; vigorous new competitors in the marketplace ready and eager to provide services we have ignored; and sharp conflict among faculty administrators and other leaders about which of these problems need immediate attention and how to address them.

To state the case as succinctly as possible, we are convinced that unless our institutions respond to the challenges and opportunities before them, they risk being consigned to a sort of academic “Jurassic Park”, places of great historic interest, fascinating to visit, but increasingly irrelevant in a world that has passed them by.

The Kellogg Commission, brought together under the aegis of NASULGC and consisting of the presidents and chancellors of twenty-three institutions and/or systems, plus Peter McGrath and myself, developed as its purpose an “opportunity to issue a practical call for institutional renewal, to present an agenda for change, one grounded in a convincing demonstration that change is already underway and the conviction that more is necessary”. In short, it seeks to redefine the function, role and mission of public and Land-Grant universities to meet the challenges of a new century.

The Commission was joined by an advisory panel of non-academic leaders, including people from the private sector, school systems, government agencies and so on. The Commission has met three times, to date, during 1996. Five major topics have been adopted as the primary focus for the Commission: The Student Experience; Access; Engaged Institutions; A Learning Society; and The Culture of the Campus. The basic operating philosophy of the Commission is that if transformation abetted by twenty-three institutions can be achieved, perhaps these institutions will “show the way,” and we will in fact see the fundamental changes many of us believe are necessary for higher education to be truly effective. The success of the Commission will be measured not in terms of reports but in terms of the effective changes brought about. There will of course be reports, a home page on the Internet, and a variety of meetings.

***...unless our institutions respond...
they risk being consigned to a sort
of academic “Jurassic Park”...***

As a result of the first meeting, a publication, “Taking Charge of Change”, was prepared. This publication has been distributed to a number of institutions, and copies are available here today. The Commission truly welcomes your input as to how we might bring about changes, vertically and horizontally, in the student experience, access, the engagement of institutions with society, the development of a learning society, continuing education, extended education and, fundamental to all of these changes, the culture of the campus.

While the Kellogg Commission has received considerable attention, to some extent because of the support of the Kellogg Foundation and their willingness for the Commission to use the Kellogg name, to date most of the attention has been at the leadership level. In order to engage others in the university, last summer NASULGC Councils and Commissions were asked to give attention to the five topical areas. A number of the Commissions have already taken action, in some cases devoting their summer meetings to these five topical areas, or in developing task forces or working groups to focus on the issues.

At present, attention is directed to “The Student Experience”. A document is being developed that will give guidelines for making change in this particular area. To stimulate your thinking about the student experience, let me share some paragraphs I developed several months ago, with regard to the student of tomorrow, in fact, in many cases, the student of today.

The students of tomorrow, of the 21st century, will be of many ages, cultures and educational backgrounds. They will be both undergraduate and graduate, degree and non-degree, full-time and part-time. They will learn off-campus and on-campus. Some may rarely, if ever, come to campus. Learning sites will be many, including but certainly not limited to the traditional college or university campus. Learning will occur under controlled or organized conditions, and as a result of unorganized activities.

Assessment of learning will follow traditional methods and will also be based on outcomes and competencies. In fact, the trend will probably be toward competency- based

assessment. Assessment of skills developed through student extra-curricular activities may very well happen.

Students will learn from personal experience (by doing), by working in groups as part of a team, and through off-campus real life experiences, in some cases as interns. Real problem solving will be part of the experience, during, or as a capstone to, the student experience. Integrated and individualized learning will be the mode.

The student experience will involve greater responsibility on the part of the student for learning. The emphasis will shift from “teaching” to “learning”. Programs will be tailored to the individual student’s need. The one-size-fits-all mode common to today’s student experience will no doubt still exist to some extent, but as a supplement to the individual-focused experience. Students will play a greater and greater role in the teaching aspect of the learning experience. They will learn from each other as a recognized aspect of the student experience.

As a greater and greater emphasis is placed on learning by the individual, traditional methods, structures and institutional processes will be replaced, the calendar changed and the delivery of instruction focused on “anywhere, anytime” delivery. The traditions of the academic calendar, the curricular program, the classroom lecture, the credit hour structure, will all be reviewed and probably changed.

Tomorrow’s college education will:

- focus on outcomes/competency assessment;
- include the living environment as part of a better-controlled learning environment;
- include learning by doing, learning in teams, interdisciplinary problem-solving;
- include courses in lengths varying from a day or two to several years, “just in time” courses taught on an unscheduled basis as demand dictates;
- include a global and an international focus;
- stress quality, critical thinking, communication, skills and practice in confronting change;
- make use of advanced technologies as an extension of the human capability;
- emphasize systems-thinking;
- prepare the student for an unpredictable future.

The student experience will reflect a learning adventure in an academic culture significantly different from that of today. And this means the role of the faculty will be significantly different. A change in some, if not all, of these attributes of the student experience will require a change in the campus culture.

Shortly after Lou Gerstner became the Chief Executive Officer of IBM, he indicated that it would be necessary to change the IBM culture. At a meeting a few months after Lou joined IBM, he was asked, “Lou, how do you change a culture?” In response to the question, he raised his eyebrows, shrugged his shoulders, and said, “It helps to have a crisis.” The first step is pretty obvious: you must recognize there is a crisis.

What is culture? The dictionary I use says that culture is “the integrated pattern of human behavior that includes thought, speech, action, artifacts, and depends on man’s capacity for learning and transmitting knowledge to succeeding generations.” Think about that for a minute in the context of higher education and your own institution: “the integrated pattern of human behavior that includes thought, speech, action, artifacts, and depends on our capacity for learning and transmitting knowledge to succeeding generations” — patterns of human behavior, habits, tradition.

A great deal has been written about changing a culture. Price Pritchett⁴ says the problems come “when the world changes but the culture can’t because people in the organization won’t give it a chance.” Of course, if the crisis is bad enough the change will come easily. Frequently the crisis can be

*...the role of faculty
will be significantly different.*

brought about by the fear attendant to reduced budgets, significant impacts of new technology, legislative intervention as well as many other ways. Guidelines for responding to a crisis in bringing about a culture change include speeding up, staying cool, taking the initiative, learning by doing (not by endless study), taking more risks (the status quo is no longer an option and doing things the old way won’t produce new results), making more mistakes, striving for quality, having faith in the opportunities, taking personal responsibility. In general, do as Yogi Berra has said, “When you come to a fork in the road, take it.” Don’t be afraid of mistakes. Wayne Gretsky said, “You miss 100% of the shots that you never take.” Changing the culture requires courage and certainly risk taking. It means doing things differently.

I am reminded of a sign I encountered for the first time in a small shoe repair shop in Corvallis a number of years ago. It was one of those shops that is long and narrow, light at the front and dark in the back. But in the back there was a sign that said, “Quality, Price, Service: Pick any Two.” If you apply this to higher education, it means of course that we will all try to maintain the highest quality of service we possibly can, the highest quality of an educational experience, and the enhancement of learning. The price question refers to tuition, and we already know that tuition is perhaps very close to its limits. If we’ve already indicated that neither quality nor price is a variable, then the only variable becomes service: the way we do things, the way we enhance the learning experience for our students.

With regard to changing a culture, I want to share with you an example I’m fairly close to, or at least was close to before I retired as president of Oregon State University. It’s very appropriate for this particular presentation, inasmuch as it involves extension and extended education -- outreach.

First, let me give you some background about a decade of change at Oregon State University (OSU), the decade during which I served as OSU’s President. During that period, we reorganized the administration, introduced strategic planning, and brought Total Quality Management to the university, primarily in the non-academic aspects of an institution of higher education, but also in terms of engineering and business curricula.

4. Pritchett, Price, 1993 *Culture Shift: The Employee Handbook for Changing Corporate Culture*, Pritchett Publ. Co., Dallas, Texas

The big changes came about as a result of recognizing that the budgetary situation was changing in Oregon.

In 1988 we had a governor who recognized that the state of Oregon tried to do too much with the resources available to it. He instituted a program whereby every agency budget would be reduced by 2%, and mandated that the 2% reduction must be made by eliminating programs. Then, once that was done, the 2% was returned to be added to the remaining 98% of the programs. When we were faced with making that 2% reduction in 1988, we thought it was the end of the world. We developed criteria to help us review programs and to decide which programs might be eliminated. We survived.

Then in November of 1990 the people of the state of Oregon passed a ballot measure that limited property taxes and transferred to the state the responsibility of funding the local K-12 schools and community colleges. It offered no new sources of funds. This meant that for the first time, local schools (K-12 and community colleges) were taking a very significant portion of the state budget. All remaining state agencies were faced with making reductions in order to accommodate this support of local schools. For higher education during the next six years, it amounted to budget reductions in the state general funds of 10%, 20%, and 14%. Crisis? We certainly thought we had one.

At the same time, as a result of a legislative budget note, we were asked to reevaluate our entire administrative structure and the way we carried out our administrative

***...improve the total
university response to
local educational needs...***

processes. We brought in a consultant, Peat Marwick, to work with some of the best faculty, staff, and administrators at OSU. To make a long story somewhat shorter, we again reorganized our management

structure in a very significant way. I mention this because in our administrative reorganization we saw the opportunity to bring the Extension Service to a policy-making level within the university. That is, to lift it out of agriculture, where the Director of Extension reported to the Dean of Agriculture, and to create a high-level position for Extension at the policy-setting level of the university. The problem was, we didn't know whether to couple Extension with Research or with our Continuing Education program. We made most of the administrative adjustments, but left the decision with regard to Extension for further study.

We were fortunate in being able to call on Emery Castle, a retired faculty member, who had served as the president of Resources for the Future in Washington, D.C., who had retired from that position and returned to OSU, where he had a long and distinguished history in Agricultural and Resource Economics, as Dean of the Graduate School, and as one of the authors of an earlier Goals Commission Report for OSU. I turned to Emery for help on the question of the placement of Extension in our administration, and he, of course, agreed to do it. The result: *The Castle Report*⁵ which was designed to give advice on the placement of the OSU Extension Service within the university, did much more than that.

5. Castle, Emery N., 1993, *On the University's Third Mission: Extended Education*, Final Report to President John V. Byrne on the placement of the Oregon State University Extension Service within the university, Corvallis, Oregon, pp. 30.

The title of the report sends the signal: "On the University's Third Mission: Extended Education". Extended education was defined as education and service for citizens who are not resident at the university's campus and which draws upon the knowledge base of the university. The goal was to improve the total university response to local educational needs through extended education. I quote from the report: "The extended education mission of OSU is considered of equal importance to that of instruction and scholarly creativity, including research. To achieve this goal, each college of OSU is responsible for delivering Extended Education programs beyond the Corvallis campus to the people throughout Oregon. The success of Extended Education programs is ultimately dependent on the faculty who work directly with local people, identify needs, and develop and deliver programs. Oregon State University's key faculty in this regard are our Extension agents. Recognition of this by the leadership of on-campus academic units is essential if OSU is to achieve its mission."

In announcing the decision to move forward, I emphasized the important role that academic units had to play in implementing extended education, including Extension, in their fundamental missions. An Office of Extended Education was created, headed by a Dean and a Director, who would be responsible for the overall administration and leadership of the Extended Education programs, including the direct administration of the Extension Service. The Dean and Director would report directly to the Provost and would be an administrative equivalent of the academic deans. There would be a Council for Extended Education, including the academic deans, and there would be an external advisory committee as well.

A second element of the plan was that each extension agent, county extension agents as well as specialists, would be assigned to an academic college and would have an academic appointment in the appropriate college and/or department. Each of the academic deans would be responsible to the Dean and Director of Extended Education for the direct administration of all Extended Education programs. Finally, and most important, Extended Education would be a fundamental mission of Oregon State University, equivalent to the traditional teaching and research missions.

The report and the subsequent decision were received enthusiastically by the academic deans; Extension agents, almost to a person, were horrified; and the faculty at large were generally oblivious to what was happening. The basic philosophy behind the decision was: 1) to maintain and make use of the strength of County Extension; 2) to bring the expertise of the entire university to bear on the needs of those we served throughout Oregon as recognized through Extension; 3) to use the Extension network to assist Continuing Education and vice versa; and 4) most important, to ensure that Extended Education reaching out to all potential students throughout Oregon would be fundamental to the entire mission of the university. As a corollary to this, the entire university would begin to adopt the Land-Grant philosophy and mission; some of the departments and colleges functioned as though they were unaware they were on a Land-Grant university campus, and operated pretty much as they might if they were at a traditional, non Land-Grant university.

In order to implement Extended Education, we created a transition committee that consisted of four university faculty, four county extension agents including two county chairs, and three extension administrators or specialists. That committee developed three sub-committees: one for program planning; one for rewards (promotion and tenure); and one to serve as a steering committee.

If you're going to ask people to do different things or things they've never done before, you really must take a look at your personnel evaluation and reward system. We did such a review and developed a new set of guidelines for promotion and tenure, building on the forms of scholarship identified by Ernest Boyer.⁶ Building on guidelines already being developed in our College of Agriculture, our new Promotion and Tenure Guidelines were received and approved by the Faculty Senate without a single dissenting vote.

Since that decision in 1993, OSU has been in the business of implementing the decision. As of 1996, we have a Dean and Director of Extended Education, all of the Extension agents have been assigned to academic departments or colleges, and we have been through one promotion and tenure cycle successfully.

Was it easy to do? No. Did it require a great deal of time? You bet. Were there any surprises? Yes, there were some. As a result of this reevaluation, the Extension agents now feel they're part of the university more than they had felt before, and much of the uni-

versity is becoming aware of what it really means to be a Land-Grant institution. Some Extension agents are, of course, still confused as to who's in charge: the department head or the extension leader. Most of the

***Involve people and
empower people.***

deans who function on the Council for Extended Education are working well together. There are, of course, some problems as there always will be. But generally, the program is working harmoniously.

Recently, I talked to Lyla Houghlum, the Dean and Director of Extended Education, and she indicated that the promotion and tenure activity "really went well." New guidelines provided the framework, and Extension is now better known throughout Oregon State University and Extension agents now recognize what other faculty do in areas of outreach. It helps to have the Dean and Director of Extended Education on the Provost-level promotion and tenure group. Surprises: several Extension agents ended up in the College of Liberal Arts; some departments found that the more traditional faculty were now outnumbered by the "extension faculty." Lyla Houghlum's final assessment: "WE ABSOLUTELY DID THE RIGHT THING."

Did we change the culture? Probably not completely. But we're in the process of changing it. Are there lessons learned? Of course. Some of these lessons are the same learned by Don Petersen, when he changed the culture at the Ford Motor Company some years ago. The lessons we learned and the lessons Petersen learned are: 1) upper level administration should not attempt to manage the details; 2) learn by doing -

6. Boyer, Ernest L., 1990, *Scholarship Reconsidered: Priorities of the Professoriate*, the Carnegie Foundation for the Advancement of Teaching, Princeton, New Jersey, pp. 147.

encourage pilot projects; 3) encourage teamwork; 4) encourage people to be open to change; 5) be a cheerleader (higher level administrators must be out in front of the charge); and, 6) most important of all, communicate, communicate, communicate. Involve people and empower people. Once successfully empowered, workers rarely want to go back to the former culture.

Finally, let me express my congratulations to you. You're well about the business of changing your culture. You are also well about recognizing the importance of outreach as part of the fundamental mission of a Land-Grant university. It's clear to me that you folks at Auburn are "Taking Charge of Change". All Alabamians will benefit.

I wish you well.



STRATEGIC PLANNING FOR UNIVERSITY OUTREACH AT AUBURN UNIVERSITY

Report of the University Outreach Strategic Planning Committee

John G. Heilman, Associate Dean and Professor, College of Liberal Arts, Chair
Richard A. Alekna, Director, Distance Learning and Outreach Technology
L. Conner Bailey, Professor, Agricultural Economics and Rural Sociology
Gary B. Beard, Assistant Dean, College of Veterinary Medicine
George W. Bengtson, Associate Dean and Professor, School of Forestry
James O. Bryant, Associate Dean, College of Engineering
Keenan D. Grenell, Assistant Professor, Political Science
Eleanor V. Howell, Dean (Interim) and Associate Professor, School of Nursing
Susan S. Hubbard,
Extension Coordinator and Assistant Professor, School of Human Sciences
Maury Matthews, Director, Outreach Planning and Development
Cheryl E. Morgan, Associate Dean (Acting) and Professor,
College of Architecture, Construction, and Design
David S. Newton, Assistant Dean and Associate Professor, School of Pharmacy
Robert E. Pearson, Assistant Dean and Professor, School of Pharmacy
Lloyd L. Royston, Assistant to the Director, Alabama Cooperative Extension System
Robert E. Rowsey, Assistant Dean and Professor, School of Education
William I. Sauser, Executive Director,
Business Outreach and Professor, College of Business
Ronald L. Shumack, Associate Dean and Professor, College of Agriculture
Marllin L. Simon, Outreach Representative and Associate Professor,
College of Sciences and Mathematics
W. Gaines Smith, Director (Interim) and Associate Professor,
Alabama Cooperative Extension System
Landa L. Trentham, Professor, Educational Foundations, Leadership, and Technology
Keith J Ward, Director and Associate Professor, Center for Governmental Services

CONTENTS

STRATEGIC PLANNING FOR UNIVERSITY OUTREACH AT AUBURN UNIVERSITY:

*Report of the Auburn University Outreach
Strategic Planning Committee*

Executive Summary	53
Introduction and Acknowledgments	54
Charge to the Committee	56
Assumptions and Values	57
Vision	59
Mission	59
Context	59
Definition of Outreach	61
Outcomes	62
Impediments and Action Steps	62
References	73
Appendix: Examples of Outreach	75

EXECUTIVE SUMMARY

The objective of the Outreach Strategic Planning Committee is to support excellence in outreach at Auburn University. To this end we have defined Auburn's outreach mission and identified impediments to excellence in the performance of this mission. We recommend steps that address those impediments and support excellence in outreach and leadership at the national level.

The time is right for this undertaking: societal forces increasingly compel the university to be responsive and accountable to the society that sustains it. The methods and missions of outreach are well-suited to addressing this challenge. Outreach involves the application of instruction and research to the needs of, and for the direct benefit of, audiences external to the university. It goes well beyond the framework of cooperative extension to include many forms of continuing and distance education, education for non-traditional students, and technical assistance. Just as outreach at Auburn takes many forms, it also has many audiences; some are well-established as client groups, while others are developing into this role.

Outreach so conceived complements and enriches traditional instruction and research, rather than competing with them. At the same time, it is clear that outreach takes time and energy. The report therefore proposes specific steps that will allow outreach to be recognized, evaluated, and rewarded on an equal footing with, and in relation to, teaching and research. These steps support a vision of outreach in which our faculty and staff routinely and effectively help the people and communities of the State of Alabama and beyond to use the knowledge resources of Auburn University to solve their problems and improve the quality of their lives. Very importantly, the steps set forth in this report do not imply a mandate that Auburn University faculty and staff do more without new resources. Rather they envision systematic recognition and reward for the vast amount of outreach already being done.

The greatest impediments to growth and excellence in Auburn University Outreach are matters of organizational culture. There is a pervasive awareness that outreach is poorly rewarded in terms of promotion, tenure, salary improvements, and professional mobility. Furthermore, there is widespread confusion over what outreach is and what forms of activity it includes. This state of affairs stands in stark contrast to the profusion of outreach conducted daily throughout the University. Outreach constitutes a robust, thriving, and increasingly indispensable part of what we do.

Universities across the country, including Auburn, are being asked to do more with less and at the same time to be responsive and accountable to the societies and stakeholder groups that sustain them. Auburn's vast and varied investments in distance education and continuing education, in cooperative extension, and in technical assistance, speak directly to this mandate, as do the myriad less formally structured ways in which Auburn faculty share their professional expertise with the people of Alabama.

The university must address the very real contradiction between what we do and how it is viewed and rewarded. This report offers a way to proceed. It begins by stating the importance of outreach, and by offering a definition that connects outreach conceptual-

ly to instruction and research. The report proposes a series of operational outcomes that represent excellence in outreach activity. The outcomes provide a basis for credible and objective assessment of outreach for purposes of promotion, tenure, and salary improvement. The report proposes additional steps to empower meaningful rewards for outreach based on objective assessment. One such step is the formulation of a standard faculty workload. Properly crafted, it would account for variability across disciplines. Rather than providing an excuse for demanding that faculty do more, it would provide a way to credit the full range of what faculty already are doing. Additional steps include provision for the assignment of portions of departmental budgets to outreach, and reliance on outreach achievement and expertise as a basis for appointing some members of the Promotion and Tenure Committee.

The envisioned empowerment of outreach requires effective communication both inside and outside the University. Our external constituents need meaningful access to the many services Auburn has to offer; a key condition of this access is that they can conveniently learn what those services are and how to make use of them. Internally, leadership from the President and Provost is essential if faculty are to redefine their missions. Administrators at all levels must communicate that outreach includes a very wide range of services and activities, that a personal investment in outreach will receive both technical assistance and professional recognition and reward, and that Auburn's administration is strongly committed to outreach, both morally and materially, as a central element of the University's mission.

The empowerment of outreach is a national as well as a local enterprise. The members of the committee both hope and recommend that Auburn University pursue, with energy and commitment, the vision of national leadership offered in this report.

INTRODUCTION AND ACKNOWLEDGMENTS

The Outreach Strategic Planning Committee is pleased to submit this report to Dr. David Wilson, Associate Provost and Vice President for University Outreach at Auburn University. Convened by Dr. Wilson in the spring of 1995, the committee includes staff and faculty members representing each of Auburn's twelve colleges and schools, as well as various units of University Outreach. The committee met twenty-three times, for periods typically lasting an hour and a half. Substantial portions of work were accomplished by subcommittees that dealt with distance education, organizational issues, rewards and assessment, the role of Auburn University at Montgomery, and structural issues.

The committee consulted portions of the growing literature on university outreach, including strategic plans developed by other universities. This literature has richly informed our work and is reflected throughout the report. Also, committee members met with President William Muse and Provost Paul Parks; with the Chair of the General

Faculty, Kent Fields, who arranged an introductory presentation to the University Senate; with the deans of Auburn's schools and colleges; and with department heads. Committee members also met with representatives of outreach units at other universities, both inside and outside the State of Alabama.

The report begins with an overview of Dr. Wilson's charge to the Outreach Strategic Planning Committee. It then sets forth some of the assumptions and values that the committee brought to its work.

Next, the report offers a vision for University Outreach, and a statement of Auburn's outreach mission.

Following that, a section on the environment of higher education estab-

***Our goal is
to support
excellence in outreach.***

lishes the political, economic, social, and technological context that university outreach must address on the eve of the twenty-first century. Subsequent sections define outreach conceptually; specify operational outcomes of high quality outreach; and identify impediments to excellence in outreach at Auburn University; in each case recommending specific action steps to be taken by the Associate Provost and Vice President for University Outreach. The recommended steps promote excellence in outreach by providing a comprehensive framework of accountability for the many activities conducted at Auburn within the framework of this mission.

The committee wishes to express three concerns and indicate its responses to them. First, we were from the outset aware that some committee reports have few readers and little impact. Accordingly, we took steps to engage principal stakeholders in the planning process, and we have proposed action steps in operational terms so that at least the degree to which our recommendations are implemented can readily be determined.

A second concern has to do with a possible interpretation of the committee's proposals. As the parts of the report dealing with context and values make clear, we firmly believe that the environment of higher education is changing dramatically, and that steps to enhance excellence in outreach represent a positive, even necessary, response to our changing times. Because we define university outreach in terms of instruction and research, our recommendations may be interpreted as a reach for power, an attempt to pull more and more instruction and research under the purview of the outreach mission of the university. This is neither our goal nor our intent. Our goal is to support excellence in outreach. We seek to do this by proposing that outreach be measured and assessed in a way that makes it directly comparable to instruction or research in Auburn's faculty reward system. The report does not intend nor does it attempt to enlarge the administrative domain of outreach at the expense of instruction and research.

Thirdly, and most importantly, this report may be seen as a call for more outreach activity without new resources. Rather, we see the steps proposed here as enabling recognition and reward for the vast amount of outreach currently being conducted across the university. Further, we call for additional resources.

The members of the committee wish to express appreciation for the ideas, support, and encouragement offered by all those who shared in our work. We are particularly

grateful to Dr. C. Eugene Allen, Provost for Professional Studies, University of Minnesota; Dr. Kent Fields, Chair of the Auburn University Senate, 1995-1996; Dr. Maury Matthews, Advisor, University Outreach, Auburn University; Ms. Donna L. McGinty, Assistant to the Director, the Georgia Center for Continuing Education, University of Georgia; Dr. Edward G. Simpson, Jr., Associate Vice President for Services and Director, the Georgia Center for Continuing Education, University of Georgia; Dr. James C. Votruba, Vice Provost for University Outreach, Michigan State University; Dr. David Wilson, Associate Provost and Vice President for University Outreach, Auburn University; and Dr. S. Eugene Younts, Vice President for Services, University of Georgia.

CHARGE TO THE COMMITTEE

The Auburn University Outreach Strategic Planning Committee was created to formulate a road map to guide the development of University Outreach into the year 2000 and beyond. The committee was specifically requested to deliberate upon a definition for outreach to provide a scholarly and intellectual basis in the community of scholars. The charge given to the committee also provided an extensive set of questions organized around these topics: definitions, impediments to outreach, structural issues, direction and action.

Definitions.

- What is University Outreach and how is it integrated into the mission and vision of a university, particularly a land-grant university? How does it differ from service?
- Is *outreach* cross-cutting, comprising an aspect of instruction, research, and service?
- Who are the clients and the constituencies of University Outreach at Auburn University?

Impediments to Outreach.

- What impediments lie before University Outreach, both internal and external? How may they be addressed?
- How may funding for University Outreach be improved? What incentives can be developed? Are there implications of structure for costs, funding, and participation?
- How might the image of *outreach* as a scholarly activity be enhanced? How might faculty be acculturated to *outreach* as a pervasive university function? How is outreach leadership developed? What programs of faculty and staff development are needed?
- What constitutes effectiveness and excellence in *outreach*? How is *outreach* expressed in the lives of faculty members and how is balance achieved? How can outreach performance be demonstrated for promotion and tenure?

Structural Issues.

- What structure(s) for University Outreach might be most efficient and effective? How may centers and institutes best fit within the outreach umbrella? What are the roles of the University's schools and colleges, and how should they relate to the Associate Provost and Vice President for University Outreach?
- What role should distance learning play in extending Auburn's instructional, research, and outreach mission across the state, the region, and the nation? How should structures for the delivery of distance learning be coordinated? Examples of relevant programs and offices include Engineering Graduate Outreach, the Master of Business Administration program, master's degrees in Nursing and in Hotel and Restaurant Management, Telecommunications and Educational Television, and Distance Learning and Outreach Technology.
- How should the Alabama Cooperative Extension System be integrated into the University mission?
- How does Auburn University at Montgomery relate to the whole of University Outreach?

*...provide a scholarly
and intellectual basis in the
community of scholars.*

Direction and Action.

- What are the major directions for University Outreach in the year 2000 and beyond?
- What are desired outcomes of *outreach*?

ASSUMPTIONS AND VALUES

The Committee has incorporated several assumptions and values into its work. Prominent among them are:

- Auburn University's Twenty-First Century Commission has endorsed, and the Mission Statement Task Force, now at work, will endorse a prominent and visible role for outreach in the twenty-first century.
- Success in outreach depends on confident participation by the faculty, supported by an enthusiastic administrative commitment that begins with the President and Provost.
- Faculty engaged in outreach should be rewarded for their activities just as they are rewarded for teaching and research.
- Outreach can usefully be defined in terms of teaching and research applied to the direct benefit of constituencies external to the universi-

ty. These constituencies typically include, but are not limited to, the people (of all ages), groups, schools, businesses, organizations, and the communities of the State of Alabama.

- It is essential that outreach be clearly defined in terms of outcomes, and that it be assessed and rewarded using concepts and methods that are developed and accepted nationally, not just locally.
- University Outreach should work with existing constituencies and cultivate new ones, as appropriate, to address the needs of Alabama and the nation in the 21st Century.
- Priorities must be established so that University Outreach does not attempt to be all things to all people.
- All University units, but not necessarily all individuals, are responsible for conducting outreach.
- A goal of the report is to propose a comprehensive set of action steps to promote outreach activities and rewards for them.

The Committee notes with approval the following values and principles set forth in the strategic planning document prepared for the University of Minnesota (17):

- * *Apply the highest standards of integrity in academic planning.*
- * *Academic freedom brings with it a responsibility to society.*
- * *Academic employees owe their primary professional commitment and responsibilities to the University and its mission.*
- * *Professional activities and relationships at the interface with society benefit individuals, the University, and society.*
- * *Each member of University community is responsible for ensuring that her or his outreach activity does no harm to individuals or society.*
- * *Outreach is a two-way exchange of knowledge, ideas, and vision between the University and society.*
- * *Outreach programs should be equitably accessible to a diversity of peoples.*
- * *Outreach should be based on quality scientific investigation [and quality instruction!]*
- * *Outreach programs should be defined and relevant locally, but provide a global perspective.*
- * *Collaboration with public and private partners improves the design, development, and implementation of outreach programs.*

VISION

The committee's vision of outreach consists of a thriving partnership between Auburn University faculty, staff, and students, on the one hand, and the people and communities of Alabama and beyond on the other. In this vision, the people and their communities routinely make effective use of the knowledge resources of Auburn University to serve their needs and help them solve their problems and improve the quality of their lives.

...thriving partnership between faculty, staff, and students... and the people and communities of Alabama and beyond.

The providers of those resources within the University, especially the faculty, routinely and confidently commit portions of their time and expertise to outreach, secure in the knowledge that their work will be reliably assessed and rewarded within their own institution and within the broader academy. The University acts not only to maintain effective and efficient connections with established constituencies, but also to discover emerging constituencies and cultivate appropriate connections to them.

MISSION

Auburn's mission is threefold: instruction, outreach, and research. These three components are interrelated. Instruction involves the transmission of knowledge and skills. Research involves the generation, or synthesis, of knowledge and also involves the publication, broadly understood, of the knowledge so produced. Auburn's outreach mission involves the application of instruction and research to the needs of, and for the direct benefit of, audiences external to the university. These audiences typically include, but are not limited to, the people (of all ages), groups, schools, businesses, organizations, and communities of the State of Alabama. Outreach does not supplant the traditional research and instructional missions of Auburn; it extends them in applied fashion to external audiences.

CONTEXT

Powerful forces for change are impelling universities to be increasingly responsive and accountable to the stakeholders that sustain them. The outreach mission addresses this mandate.

Public confidence in the major institutions of society, including those of higher education, has eroded. Power has shifted from the national government to state and local governments and the private sector. Minority and aging groups have gained in size and economic and political power. The cold war and the exploration of space have lost much of their power to legitimize national investment in higher education. Candidate issues to replace them in this role include community and economic development, economic competitiveness, education, the environment, youth at risk, health, and the family.

The capacity of the public sector to respond to these issues through social and economic programs is in doubt both philosophically and financially. Federal as well as state budgets reflect the dwindling of available funds relative to public demands for services. These constraints have translated into cutbacks in federal support for students and for research, and into substantial reductions in state support for higher education.

As resources have become increasingly limited, themes of accountability and consumer rights have moved to the center of debate about business, government, and the university. The professoriate is under attack for ignoring students and devoting too much time to research that is seen as trivial. And, specifically in relation to the land-grant mission, Edward F. Vitzthum (18) argues that the "extension and research systems of land-grant institutions are in trouble." The size and political power of the agricultural sector are decreasing, as is the reliability of legislative support for cooperative extension at the federal and state levels.

At the same time, pressing social and technological changes are forcing a rethinking of the university's instructional mission. To cope with rapid social change on many dimensions, people will need the training and the resources to be life-long learners. Calls for

education across the life-span are accompanied by calls for the university to provide "knowledge without boundaries" to the nation's economy, workplaces, and communities.

The explosion of information tech-

***Outreach... is a distinguishing,
perhaps the distinctive,
mission of Auburn University.***

nology has helped give rise not only to these changes but also to a supply of "virtual" education services to compete with those offered by traditional universities. These competing services provide both education for degree credit and non-degree credit education. In the words of James Votruba, Vice Provost for University Outreach at Michigan State University, universities have lost the monopoly they have historically enjoyed over the commodity of educational information.

In a word, the societal forces just described increasingly compel universities to be directly "responsive" to the society that sustains them. The methods and mission of university outreach are well-suited to addressing this challenge of the twenty-first century. By definition they respond directly and publicly to the needs of the society that sustains the university and of the constituent groups that make up that society. Outreach is thus a central element of Auburn's service to the people of Alabama and beyond, and is at the heart of Auburn's land-grant tradition. It is a distinguishing, and perhaps the distinctive, mission of Auburn University.

DEFINITION OF OUTREACH

We define *outreach* both conceptually and operationally. Examples of work being done in units at Auburn appear in the appendix to this report. **Conceptually, outreach is instruction, or research, or instruction-and-research that is applied to the direct benefit of external audiences and that is directly relevant to the mission of the units in which the contributing faculty and staff members work.**

This definition raises several issues. One is how the concept of outreach relates to the concepts of *extension* and *service*, especially as they are discussed in the *Auburn University Faculty Handbook*. Pages 3:10 and 3:11 of the Handbook specify the following categories of activity as rewardable through tenure or promotion: "1) teaching and/or extension, 2) research/creative work, and 3) [university, community, and professional] service." The strategic planning committee regards outreach as separate from service; service should not be viewed as outreach.¹

Further, outreach is a much broader term than extension, which, at a land-grant institution such as Auburn, can be interpreted narrowly to mean cooperative extension work with its traditional constituencies. Outreach refers to the full breadth of activity that fulfills our initial definition; extension is an honored part, but far from all, of outreach.

The committee recognizes that this interpretation is not consistent with the three categories for tenure and promotion recognition set forth in the *Faculty Handbook*. The three categories as stated appear to suggest that instruction and outreach are substitutable for each other, and that taken together they are no more important than service. Service also appears to be given status as a university mission comparable to instruction, research, and outreach. The university community, including the University Senate, should revisit these issues.

Our definition of outreach also raises the issue of how the quality of outreach can be assessed. Outreach activities as we have defined them can include teaching components, or research components, or both teaching and research components. Accordingly, the assessment of outreach should be understood as the assessment of teaching that is outreach teaching, or the assessment of research that is outreach research, or the assessment of activity that incorporates both outreach research and outreach teaching. Again, the committee emphasizes that part of the intent of this definition is to allow outreach to be assessed using credible and reliable methods similar to the methods used to assess instruction and research.

The committee believes that the usefulness of its conceptual definition would be enhanced by a set of examples of outreach currently conducted at Auburn. Accordingly, in the section of this report on impediments to outreach and action steps, we recommend the compilation and dissemination of examples of high quality outreach teaching

¹Service is both internal and external. Internal service is often devoted to carrying out basic management functions of a department or college or the university, such as planning, coordination, representation, recruitment, reporting, and communication. Committee work often is involved. External service involves similar activities addressed to audiences outside the university. Work with professional organizations, professional journals, charities or other service organizations would be examples. In some cases the line between service and outreach may be unclear. For instance, if a faculty member gives a speech or writes a newspaper article about a personal hobby, outreach is probably not involved. But if the same faculty member speaks or writes extensively on subjects related to professional expertise or organizational mission, then outreach may well be involved. In such cases, the concepts of professional expertise and unit mission may clarify whether activity is outreach or service. In any event, the committee takes the view that service should not be interpreted or rewarded as outreach.

and outreach research at Auburn. The examples will supplement our conceptual definition, and will also draw on the operational categories of outreach impact that we specify. An initial compilation of outreach examples appears in the appendix to this report.

The path from our conceptual definition to the assessment of outreach quality proceeds through the categories of operational outcomes or impacts that we expect of outreach. Given that outreach is teaching or research that is applied, one element of assessing outreach will be to determine the nature and extent of its impact on external audiences. The notion of outcomes is central to this determination.

OUTCOMES

The Outreach Strategic Planning Committee recommends the adoption of eight categories of operational outcomes as developed in the outreach strategic planning document for the University of Minnesota (17). These categories represent a “taxonomy for outreach,” and identify the real-world outcomes that should be detectable if outreach impact is claimed. Thus they can serve as the basis for operational definitions of outreach impact that can be incorporated into methods for assessing the quality of outreach activity. The eight categories of outcome are:

- *enlightened citizens, liberally educated across the life span;*
- *mentally and physically healthy youths and adults;*
- *educated professionals and skilled work forces;*
- *informed and orderly public policy development;*
- *effective, productive organizations, groups, and communities;*
- *globally competitive businesses and industries;*
- *sustainable human-made and natural environments;*
- *effective public institutions, infrastructures, and community designs.*

IMPEDIMENTS AND ACTION STEPS

This section of the report discusses impediments to excellence in outreach that exist at Auburn, and action steps are recommended to overcome them. The approach is to identify and discuss an impediment, and then to propose one or more action steps aimed at overcoming the impediment. It is important to note that the different impediments are interrelated, as are the recommended action steps. Accordingly, the discussion of one impediment may refer to or involve action steps listed as responses to other impediments. Ideas that appear in one section may be repeated in another; the purpose is to clarify the connections among the various issues and recommendations.

The impediments to outreach at Auburn are so varied and so deeply rooted that a cultural transformation will be needed to address them comprehensively. It is appropriate to think in such broad terms. The societal forces affecting the university are so powerful that major change is inevitable. Our opportunity is to shape the direction of change

through steps to overcome the impediments to outreach. The discussion of impediments is organized into the following general categories: perceptions; rewards; assessment; information and communication; directions; distance education; structural arrangements; and funding. No separate section on policy is included because the action steps themselves represent policy recommendations. Again, all recommendations are stated in terms of actions that can be taken by the Associate Provost and Vice President for University Outreach. In several instances the steps recommended have been overtaken by events and have been taken or are in the process of being taken.

Perceptions.

Impediment. A primary impediment to excellence in outreach lies in faculty perceptions. Perhaps stereotypically, outreach is seen as not worth doing because it imposes costs on those who do it, and there are few rewards for it in the academic disciplines the faculty represent. Among the costs are that outreach takes time, it is hard to do, and frequently requires the acquisition of new skills. Once the investment is made, rewards other than personal satisfaction are few. Outreach is often done off-load, suggests low professional status for those who do it, and is not rewarded at promotion and tenure time. In other words, outreach “comes out of the hides of faculty members.”

***...stereotypically,
outreach... imposes costs...
and there are few rewards...***

Very importantly, outreach is far inferior to research, the “currency of mobility” between academic institutions. Finally, at Auburn *outreach* is often equated with extension, implying that outreach is something that full-time specialists do, rather than something that might routinely form a portion of a faculty member’s work load. Faculty who desire to include a significant outreach component in their work will need between perhaps 15% and 50% of their time specifically assigned to outreach if their performance of this mission is to be properly evaluated and rewarded.

The perceptions just described will change only over the long term; they are rooted in the professional socialization and experience of many faculty. Research has been, and for many faculty will continue to represent, a currency of mobility. It is also the case, however, that many disciplines are experiencing both an oversupply and continuing overproduction of Ph.D.’s. Furthermore, universities are increasingly under pressure to reduce the numbers of their faculty and, in some cases, to limit or discontinue the granting of tenure. The hope of academic mobility as a result of research excellence thus appears unlikely to offer a realistic motivation to even a simple majority of tenure-track faculty. It is conceivable that in the future faculty may achieve mobility through excellence in outreach, as some have been able to do through excellence in their teaching. In this context, we believe steps can be taken to support a commitment to outreach on the part of interested faculty.

Action Steps. The action steps proposed in several of the following sections, especially those relating to communication, assessment, and reward, are intended in part to sup-

port a gradual transformation of Auburn's culture in favor of participation in outreach. To prepare a foundation for these action steps:

- The Associate Provost and Vice President for University Outreach should undertake a highly visible effort, involving the President and the Provost, to communicate to Auburn's faculty that for many reasons a national outreach movement is under way; that outreach is increasingly valued by our peer institutions, and expectations are rising nationally for faculty participation in and reward for outreach; and, that Auburn is in the forefront of this movement and is taking steps to ensure that outreach does not come "out of the hides" of the faculty.

Rewards.

Impediment. Faculty who spend time and energy on outreach are not rewarded for doing so to the extent they are rewarded for research or instruction. The reliability and probability of rewards for outreach performance through tenure, promotion, and salary enhancement need to be increased. The committee concludes that a series of related steps can promote this outcome. Some of them are specified in this section, others in other sections.

One of the most significant steps proposed in this report is the definition of a *standard work load*. Properly crafted to reflect variability across disciplines, this definition would

The issue in tenure and promotion and salary decisions is quality.

assist faculty and their unit heads in specifying portions of their on-load assignment that could be devoted to, and evaluated and rewarded as, outreach. At the departmental level and within the context of a standard work

load, negotiations would determine assigned duties for each faculty member. These duties would, by definition, be mission-related and could include outreach assignments.

Mission-related activities that cannot readily be accommodated within the standard load, such as some short courses or technical assistance, could be assigned on the basis of extra compensation. Opportunities that are not mission-related would be considered consulting, a private matter between the faculty member and the outside employer and subject to the university's policy on consulting; such activity would not be considered for tenure or promotion. On the other hand, all activity *compensated by the university* should be allowable for consideration in salary and tenure and promotion decisions, assuming the activities in question reflect and serve the mission of the faculty member's unit.

The issue in tenure and promotion and salary decisions is quality. It is important to clarify the roles of unit managers and faculty members. Unit administrators decide **whether** outreach should count toward these rewards; faculty members assess quality and determine **how much** the activities accordingly count.

Action Steps.

- Work with the Senate Rules Committee to achieve appointment to the Promotion and Tenure Committee of faculty members who understand outreach and accept its importance, including some who have achieved promotion to the rank of professor at least partly on the basis of their excellence in outreach.
- Use the definitions of outreach offered in this report to inform the debate of the Promotion and Tenure Committee.
- Work with appropriate stakeholders to develop a policy that specifies the standard work load of Auburn faculty. The concept of a standard work load is being examined as this report is being completed. That examination should continue and lead to a definition that is sensitive to the variability that exists across disciplines and departments.
- Continue the effort, under way as this report is being completed, to revise policies and procedures with respect to the UPO-10 consulting policy so that they reflect and are consistent with relevant recommendations presented in this report.
- Promulgate the view that outreach is not mandatory for individual faculty members, but that all units are responsible for outreach and should include it in their planning. This approach is intended to assist department heads in negotiating outreach loads that reflect the interests and abilities of their individual faculty members.
- Work with the academic deans to support negotiation at the unit level of on-load outreach assignments for interested faculty members.
- Work with appropriate stakeholders to ensure that mission-relevant university-compensated activity is countable for tenure and promotion. It should be possible for a faculty member to carry out and be rewarded for an on-load assignment conducted through an outreach center or institute as well as through the faculty member's home department.

Assessment.

Impediment. Reliable reward for outreach through tenure, promotion, and salary improvements requires the development of more credible standards and processes for determining the quality of outreach than now exist. Some universities have initiated in-house efforts to develop such standards and processes.

Having defined outreach in terms of teaching and research, the committee suggests that the assessment of outreach can be treated to an important extent as the assessment of outreach research and outreach teaching. The generation of new knowledge or the synthesis of existing knowledge to the end of its practical application can be subsumed under one or both of these traditional headings. At the same time, outreach assessment appears to involve more than the assessment of teaching and/or research.

In terms of what this something more may be, the committee proposes **leadership**, as a consideration in the assessment of application. That is, outreach practitioners who generate new knowledge or synthesize existing knowledge and apply the results in a local setting may be exercising local leadership. Application can involve facilitation and can be leadership. Such leadership through application should be recognized and integrated into the reward system. In terms of operational definition, one way to detect such leadership would be through the observation of positive impact of outreach activity in one or more of the eight outcome areas our committee identified as the desired operational outcomes of outreach.

Our conception of outreach assessment requires a *national basis for peer review*. National arenas for assessment are firmly in place for research and are increasingly available for teaching. For outreach to achieve the same kind of respect and credit as research and instruction, it must also have access to a national arena for the assessment of quality. The development of this arena will entail national networking: activity **among** institutions rather than simply **within** individual institutions.

A national network could supplement the local base of recognition with an outreach equivalent of national recognition as we know it for research. Review entities might involve both service providers and service recipients. To say these things does not mean that national-level peer review is necessary in every instance in which outreach work is being assessed. The point is that a credible and active mechanism for such review should be available to be called on as appropriate.

Action Steps.

- Establish as a priority that Auburn assert leadership in developing a national arena for assessment of outreach quality.
- Establish a university-level committee, with strong faculty participation, to recommend criteria and procedures for assessment of outreach performance. Recommend that the committee consider adopting the outcome categories set forth in this report. Also recommend that this committee examine pertinent sections of the *Faculty Handbook* and suggest appropriate changes. Further, recommend that this committee address the assessment of clinical work, as indicated in the next recommendation.
- Recognize clinical excellence, with attention to the dimension of care for clients, as well as to the dimension of education of clients.
- Organize a national conference on the subject of outreach assessment. The conference should publish proceedings and could be held periodically on different aspects of outreach assessment.
- Cause to be compiled, and disseminate, a catalogue of outreach at Auburn, organized around the outcome categories set forth in this report. Work already under way on such a compilation as this report is being written should be utilized for this purpose. Widespread dissemination of this catalogue should be undertaken with two objectives in mind. The first objective is increased understanding of the

enormous amount and range of outreach activity at Auburn. The second objective is to help faculty members visualize the ways in which their outreach activities can help them to secure reward through tenure, promotion, and salary improvement.

- Identify national or regional organizations that can support the development of outreach assessment, and engage Auburn people in the relevant work of these organizations. The members of the University Outreach Council can assist in this process.

- Identify a professional journal devoted to outreach and involve Auburn in the work of this journal, especially with respect to assessment. In the work of this journal encourage an emphasis on best practices in outreach, and on case reports on successful career development based on outreach. It should be noted that successful cross-disciplinary journals of this type are well-established in the professional discipline of evaluation. This is not mere coincidence: the field of evaluation revolves around the assessment of applied work that in many instances fits within the definition of outreach presented in this report.

It should be noted that successful cross-disciplinary journals of this type are well-established in the professional discipline of evaluation. This is not mere coincidence: the field of evaluation revolves around the assessment of applied work that in many instances fits within the definition of outreach presented in this report.

This is not mere coincidence: the field of evaluation revolves around the assessment of applied work that in many instances fits within the definition of outreach presented in this report.

- Encourage the academic deans to work with faculty and department heads to develop outreach portfolios, comparable to teaching portfolios, to support outreach-based applications for promotion or tenure.

...outreach assessment requires a national basis for peer review.

Information and Communication.

Impediment. Neither Auburn's faculty nor its external constituencies appear well informed about the range of outreach opportunities available in the university. Excellence in outreach depends in part on the matching of service providers in the university with beneficiaries outside the university. The chances for successful matching can be enhanced by steps to inform internal and external stakeholders about outreach opportunities.

Action Steps.

- For purposes of both public accountability and public information, there needs to be a system of regular reporting of outreach activity and accomplishments by colleges and departments, in a manner similar to the regular publication of research reports by the Office of Contracts and Grants Administration. Accordingly, continue the work of the Office of Outreach Information and Marketing, with emphasis on the coordination of information that units across campus develop concerning their outreach efforts, and with emphasis on the targeting of this information to consumers in the outreach market.

- Emphasize to outreach units across campus the importance of publicizing what they do, and emphasize the role of the Office of Outreach Information and Marketing in informing potential customers for Auburn's outreach services.
- Continue to develop the outreach page on Auburn's World Wide Web site, and strive to achieve innovative leadership in the use of this channel of communication.
- Emphasize the brokering of outreach opportunities. Auburn is a large and complex organization. Information does not always flow smoothly within it or between it and external constituencies. Information brokering units exist that focus on the needs of external constituents and possible responses to those needs. The brokerage function of these key units should be emphasized.
- Incorporate outreach into the socialization of new faculty by instituting a program to bring new faculty face-to-face with the University's outreach presence in the State of Alabama. The "Meet Michigan" program could serve as an example.
- Initiate a series of high-profile presentations or colloquia at Auburn on the subject of outreach, featuring the leaders of Auburn and national leaders in outreach.
- Encourage academic deans to disseminate this strategic plan to departments in their colleges and schools, and to obtain feedback from the faculty in these units.

Directions.

Impediment. The programmatic direction of outreach at Auburn needs clarification. The issue here is one of program content, rather than organizational priorities such as assessment, reward, communication, and funding, that are discussed elsewhere in this report. The statewide fora held during the summer of 1995 revealed confusion and disagreement among

A principal... is that University Outreach should build on, but not be limited to, its existing strengths.

Alabamians about what Auburn's outreach priorities should be. Some would limit Auburn outreach to tra-

ditional agricultural extension. Others in effect suggest that Auburn be all things to all people. While the fora clearly succeeded in communicating with Alabamians about outreach at Auburn, they did not provide clear guidance concerning the constituencies or priorities for outreach.

Input from the fora pointed in directions in addition to agricultural extension, including economic development, community development, education, the environment, work with youth, and communication between Auburn outreach and its constituents. The results were not strong enough or consistent enough, however, to serve as the basis for establishing priorities. A principle underlying the action steps recommended here is

that University Outreach should build on, but not be limited to, its existing strengths. A second principle is that the setting of priorities should be a bottom-up process inviting flexibility and initiative at the level of individual faculty and staff and their units, in consultation with their clients.

Action Steps.

- Challenge each unit across the university to identify its priorities for outreach, where possible linking these to the substantive priorities suggested by forum participants. The outcome categories specified in this report indicate the kinds of impacts these initiatives should aim for.
- Re-affirm the university's commitment to serving the traditional constituencies of cooperative extension, broadly understood, through outreach.
- Using the fora as a base of experience, conduct an additional forum every six to twelve months in geographic areas not earlier reached and using recruitment techniques that will ensure broadly representative attendance.
- Involve the University Outreach Council in regular discussions of programmatic directions and policy.

Distance Education.

Impediment. While the strategic planning committee was doing its work, discussion and debate developed at the university over the organization of distance education and also over policies that should guide certain distance education activities involving the offering of courses at more than one location by means of distance education technology. These are in part matters of statewide coordination and infrastructure development. An impediment to effective outreach in the field of distance education has been the lack of policy governing these matters.

Committees have been organized to recommend policies in some of these areas. One committee is addressing the organization of distance education support and infrastructure. A second committee is exploring distance education offerings between Auburn and Auburn University at Montgomery. Members of the strategic planning committee serve on each of these committees. The planning committee concludes that committees such as these are the appropriate forum for addressing issues of distance education.

Action Steps.

- The work of these two committees should be informed by this report.
- The committees should ensure that faculty members be directly involved in and responsible for all academic decisions relating to distance education. The term *academic* should be construed broadly rather than narrowly.

Structural Arrangements.

Impediment. The present organizational infrastructure needs to be developed if it is to support the transformation of organizational culture envisioned in this report. The deans, department heads, center and unit directors, and faculty should be empowered and encouraged to develop outreach programming that meets identified needs of key clienteles. Those faculty members who interact closely with such clienteles should be provided freedom, opportunity, and support to deliver meaningful outreach programming. Decentralization and empowerment, rather than centralization and control, should be the prevailing philosophy for programmatic activity in outreach at Auburn University.

In some cases the work to be done consists of building, or rebuilding, foundations for activity. The structure of the Alabama Cooperative Extension System (ACES) is the subject of court-mandated negotiations. Efforts to develop cooperative distance education efforts between Auburn University (AU) and Auburn University at Montgomery (AUM) are apparent only in the work of the committee currently charged with this task, and in negotiations between the Departments of Geography and of Political Science of the two institutions.

Action Steps.

- Several related action steps are recommended in relation to implementation of this report. First, encourage the academic deans to address the implementation of this report. In this connection, recommend that each dean consider forming a college or school outreach committee, consisting of departmental representatives, to support and promote outreach. Further recommend to deans that departmental and college strategic plans be reviewed in relation to this report, as a basis for the definition by each unit of its outreach mission. Finally, recommend to deans that they encourage the units for which they are responsible to identify outreach objectives and monitor progress toward their implementation.
- The Associate Provost and Vice President for University Outreach should devise and undertake steps to ensure that outreach is fully considered in the university's process of ongoing planning.
- Clarify with the deans and department heads their authority and responsibility with respect to outreach.
- The Office of the Associate Provost and Vice President for University Outreach should be oriented toward serving the needs of schools, colleges, departments, and centers, as well as toward providing leadership in the university and externally.
- The University Outreach Council should be retained as the primary mechanism whereby the Associate Provost and Vice President for University Outreach relates with the outreach officers of the schools and colleges. The Associate Provost and Vice President for University Outreach should confer frequently with these school/college officers

and be guided by their counsel when shaping policies and procedures relating to outreach university-wide. Each academic dean should review the role of her or his outreach officer in consultation with that officer, and should inform department heads and faculty of the nature of that role.

- Centralized functions such as those provided by the Outreach Program Office, Outreach Information and Marketing, and Distance Learning and Outreach Technology should report directly to the Associate Provost and Vice President for University Outreach. This officer should examine the extent to which the centralization of other specific service functions, such as conference support operations, would result in greater efficiency and a stronger infrastructure for outreach programming.

***The University Outreach Council
should be retained as
(a) primary mechanism...***

- Existing outreach centers should each be reviewed by the dean of the college or school of which the center is a part (rather than by a university-wide body or a member of the central administration). Decisions regarding retention, reorientation, restructuring, or disbanding of centers should be left in the hands of the deans to which they report, in consultation with the Associate Provost and Vice President for University Outreach.

- The organizational relationship of the Economic Development Institute to University Outreach should be reviewed, with consideration given to the appropriate role of the Associate Provost and Vice President for University Outreach in the direction of the Institute.

- The Center on Aging has recently been aligned with an academic school (Nursing). The Center for Governmental Services should either be similarly aligned with an academic school or college and placed under the purview of a dean, or be elevated to the status of an institute and be placed under the administrative purview of a board of deans chaired by the Associate Provost and Vice President for University Outreach.

- Work with the Senate Rules Committee to achieve appointment to the Promotion and Tenure Committee of faculty members who understand outreach and accept its importance, some of whom who have achieved promotion to the rank of professor at least partly on the basis of their excellence in outreach.

- Consult with the university library with a view to fuller utilization of library resources to support the outreach mission of the university.

- Begin negotiations with appropriate persons in ACES and at AUM concerning the role of cooperative extension at AUM.

- Continue the work of the committee examining distance education offerings between AU and AUM.
- U.S. District Court-approved plans for the structuring of the Alabama Cooperative Extension System should be implemented upon their completion.

Funding.

Impediment. Lack of resources dedicated to outreach is a powerful impediment to excellence in outreach at Auburn.

Action Steps.

- The Office of the Associate Provost and Vice President for University Outreach should focus heavily on acquiring new resources that can be shared with colleges, schools, departments, and centers so that those primary units can more effectively serve their outreach constituents. In this process the possibility of establishing an outreach foundation or endowment should be explored.

***Lack of resources...
is a powerful impediment
to excellence in outreach...***

and Vice President for University Outreach should work closely with the President and Provost to achieve a significant increase in the line item for Public Service, Research, and Extension in the university budget.

- Recommend to the President that deans be authorized to allocate portions of departmental budgets to outreach assignments for faculty. This is consistent with the mission of Auburn University and with the earmarking of a portion of the University's state budget allocation for outreach.
- Consider charging fees for outreach services that are currently provided for free. A price mechanism will help to regulate demand and to determine the value of the services to users (clients, customers).
- Work to achieve adoption of professional practice plans by colleges, schools, and departments, along the lines of plans approved for the School of Nursing and the Department of Communication Disorders.

REFERENCES

1. Auburn University Twenty-first Century Commission. 1993. *Policy Recommendations for Auburn University Extension/Outreach*. (Auburn University, Ala.).
2. Auburn University Institutional Self-Study Report, 1991-1992. (Auburn University, Ala.).
3. Boyer, Ernest L. 1995. *How Can Scholarship Be Properly Assessed?* ASEE PRISM. March 1995.
4. Breneman, David W. 1993. *Higher Education: On a Collision Course with New Realities*. Association of Governing Boards of Universities and Colleges. AGB Occasional Paper No. 22. (Washington, D.C.).
5. Clemson University. 1994. *A Case Study: Expanded Outreach at Clemson University - A report to NASULGC*. Clemson University Planning Office. (Clemson, S. C.).
6. Cornell University Report of Study Group 5: Outreach, Extension, and Public Service. 1993. (Cornell, N. Y.).
7. Goodstein, Leonard D., Nolan, Timothy M., and Pfeiffer, J. William. 1993. *Applied Strategic Planning: A Comprehensive Guide*. (McGraw-Hill, Inc., New York).
8. Jordan, Bryce. 1995. National Association of State Universities and Land- Grant Universities. Commission on Food, Environment and Renewable Resources Plenary Session White Paper: *Maintaining Public Trust in the New Century: A Land-Grant Imperative*. (NASULGC, Washington, D.C.).
9. Lynton, Ernest A. 1995. *Making the Case for Professional Service*. (American Association for Higher Education, Washington, D. C.).
10. Lynton, Ernest A. and Elman, Sandra E. 1993. *New Priorities for the University*. (Jossey-Bass, San Francisco).
11. Magrath, C. Peter. 1992. *The New Land Grant Model: New Wine in 21st Century Bottles*. Paper presented to the Harvill Conference on Higher Education. (University of Arizona, Tucson, Ariz.).
12. Michigan State University. 1995. *Points of Distinction: A Guidebook for Planning and Evaluating Quality Outreach*. (Michigan State University, East Lansing, Mich.).
13. Michigan State University. 1993. *University Outreach at Michigan State University: Extending Knowledge to Serve Society*. A Report by the Provost's Committee on University Outreach. (Michigan State University, East Lansing, Mich.).
14. Sauser, W. I. And Foster, R. S. Jr. 1991. *Comprehensive University Extension in the 21st Century*. In R. R. Sims and S. J. Sims (Eds.), *Managing Institutions of Higher Education into the 21st Century: Issues and Implications* (pp. 157- 177). (Greenwood Press, New York).
15. Thompson, A. E. and Sauser, W. I. 1992. Presentation to the Twenty-first Century Commission: *Auburn University Extension — A Vision for the Twenty- First Century*. (Auburn University, Ala.).

16. University of Illinois. 1993. *A Faculty Guide for Relating Public Service to the Promotion and Tenure Review Process*. (Urbana-Champaign, Ill.).
17. University of Minnesota Outreach Council. 1993. *Outreach at the University of Minnesota — A Strategic Plan*. A Report to the President of the University of Minnesota. (University of Minnesota, Minneapolis-St. Paul, MN.).
18. Vitzthum, Edward F. 1993. American Association for Adult and Continuing Education. Paper presented at the Annual Meeting: *Winds of Change: Toward a Realistic Vision for the Future of Cooperative Extension*.
19. Weiser, Conrad J. 1995. *The Value System of a University — Rethinking Scholarship*. In Draft. College of Agricultural Sciences, (Oregon State University, Corvallis).



APPENDIX: Examples of University Outreach

Enlightened Citizens, Liberally Educated across the Life Span

- An associate professor of music authors an opera based on regional literature. It is selected to premier in the state's largest city, and the professor raises supporting funds, directs publicity, and auditions and selects performers. The opera is hailed as a substantial contribution to the cultural heritage of the region and receives national recognition.

Mentally and Physically Healthy Youths and Adults

- An associate professor of nutrition evaluates a state-wide problem of premature and low birth weight babies and devises a program of pre-natal parent education which is adopted state-wide and reaches over 10,000 limited-resource pregnant women, leading to healthier babies. The program receives a national USDA award.
- Recognizing a severe deficit in science education of youth in the state, two professors team to win a grant to support a program of science laboratory experiences that can be transported throughout the state to enrich the program in all the schools. From that base, they develop and offer annual workshops for middle school science teachers. In addition, they develop the infrastructure to host state and regional science fairs which are held on campus annually.
- An assistant professor of audiology conducts statewide screening of school children with hearing impairments. She develops an assistive listening device center available for state-wide adoption and has modified it for use in retirement centers. This work leads to publications, to frequent consultation in medical centers, and to educational presentations to the general public on hearing loss.

Educated Professionals and Skilled Work Forces

- The State of Alabama introduced a mandatory continuing education requirement for engineers, requiring 20,000 engineers to acquire updating training prior to a specified deadline. A team of professors and outreach specialists analyzes the educational needs of the target group, devises an articulated curriculum, and adapts it for distribution by satellite video to sites across the state (and nation). The professors develop the curriculum and related materials and shape their teaching skills for an interactive televised format. The immediate problem in the state is solved, and the series continues on a regular basis for continuing engineering education both in and out of state.

Globally Competitive Businesses and Industries

- A faculty member in the College of Business develops a proposal and receives substantial grant funding to form a coalition of University partners (internal and external) to foster manufacturing statewide. Subsequently, the faculty member's proposal is adopted as a national model to guide similar grant-making in other states. The coalition provides services to 100 manufacturers annually with measurable productivity increases of \$1.5 million. A formal statewide service provider network results from the initial coalition.

Mentally and Physically Healthy Youths and Adults Educated Professionals and Skilled Work Forces

- A team of professors targets improvement of services and improvement of service providers for developmentally disabled persons. The team analyzes existing services and recommends improvements. Training programs for service providers are designed and developed and conducted statewide. A state association is formed to promote continuing professional development in the field and to train new workers. Over 40,000 clients are affected and the effort receives extensive national recognition.

Globally Competitive Businesses and Industries Sustainable Human-made and Natural Environments

- An entomology professor develops an innovative pest management program for a specific crop and implements it in 80 percent of the state's production. He intervenes in a catastrophic situation to secure federal emergency permits to avoid millions of dollars in crop losses, and he develops an insecticide management program featuring conservation of beneficial insect populations and the environment. His efforts result in positive collaborations among growers, ag-industry interests, and state and federal authorities.
- An associate professor of forestry devises a program of weed control for forest nurseries in the South which reduces annual weed control costs in southern nurseries by \$3,000,000. His recommendations on nursery practices result in improved seedling quality and are adopted across the region as well as in other parts of the nation.



FACULTY PARTICIPATION IN OUTREACH SCHOLARSHIP: AN ASSESSMENT MODEL

*Report of the Committee
on Assessment of Outreach
Auburn University*

J. Wayne Flynt, Distinguished University Professor, History; Chair of the Committee

Achilles A. Armenakis, Torchmark Professor, Management

James O. Bryant, Associate Dean, Engineering

Leonard L. Grigsby, Alabama Power Distinguished Professor, Electrical Engineering

Walter B. Hitchcock, Professor, English

Eleanor Howell, Associate Professor, Nursing

Gareth Morgan-Jones, Distinguished University Professor, Plant Pathology

Terry C. Ley, Professor, Curriculum and Teaching

Maury Matthews, Director, Outreach Planning and Development

Warren McCord, Assistant Director, Alabama Cooperative Extension System

Mary S. Miller, Assistant Professor, Agronomy and Soils

William I. Sauser, Jr., Professor and Executive Director, Business Outreach

Lee Stribling, Extension Specialist and Associate Professor, Zoology-Wildlife

Keith J Ward, Associate Professor and Director, Center for Governmental Services

CONTENTS

FACULTY PARTICIPATION IN OUTREACH SCHOLARSHIP: AN ASSESSMENT MODEL

*Report of the Auburn University
Committee on Assessment of Outreach*

Preamble	80
Where should assessment of outreach be located?	81
Conditions of outreach	81
Inclusion of outreach	82
Report appendices	83
Appendix #1: Scholarly contributions	84/85
Appendix #2: Criteria for assessing outreach	86
Appendix #3: The outreach portfolio	88
Example evaluations	
Example A	90
Example B	97
Example C	100
Example D	105
Example E	108
Bibliography	111

PREAMBLE

Assessment of Auburn University's faculty is a process with multiple stages. It begins at the department level with a clear and precise definition of expectations based on the university's mission of teaching, research, and outreach.

A department and chair should clearly communicate what is expected in instruction, research, outreach and service. As part of the annual negotiation of assignment, the head/chair should explicitly define the faculty member's duties in teaching, research, out-

reach, and service. As a result of these expectations, a new member of the faculty will direct his/her energy toward fulfilling these expectations and carefully documenting such fulfillment through a portfolio or some other procedure. The portfolio will document not only the extent and

Each department... should develop guidelines... where some perform below the benchmark, some reach it, others exceed it...

quantity of work done, but also provide evidence of the quality of the work. At some point, both the chair/head and a departmental committee will evaluate these data to determine the quality of performance in instruction, research, outreach and service for purposes of tenure, promotion and merit salary increases.

Historically, research has been the most easily defined and measured qualitative component of a major university. Recently, more sophisticated methods for evaluating teaching have been put in place. Outreach is the most poorly defined element of professional duties and perhaps the hardest to assess.

When assessing outreach, the university is assessing a component of academic life different from the traditional functions of "cooperative extension" and "service." Cooperative extension, as defined by a specific allocation of money with attendant duties, is a form of outreach. But many forms of outreach occur constantly for which neither line item funding nor formal definition of responsibilities now exists. Such examples of outreach have been largely ignored in the university reward system; yet, they may be vital in the fulfillment of mission and the reattachment of universities to their multiple constituencies and to taxpayers.

University outreach at Auburn has been defined as instruction or research "that is applied to the direct benefit of external audiences and that is directly relevant to the mission of the units in which the contributing faculty and staff members work." It is broader than extension and different from service. All faculty members are expected to serve on department and university committees. Sometimes the categories of service and outreach may be blurred. For instance, a professor in educational administration may be asked to participate on a school board where she provides her expertise on a variety of curricula, policy, and personnel matters. Such activity may cut across categories of both "service" and "outreach." A faculty member may write a newspaper article about a per-

sonal hobby or travel that would not be considered outreach. However, the same professor might be asked to write an opinion/editorial column about an area of her expertise that would be a clear example of outreach.

WHERE SHOULD ASSESSMENT OF OUTREACH BE LOCATED?

University assessment occurs at many different levels: in the department, at the college level, and with the tenure and promotion committee. As with any assessment process, the most useful information derives from those who best understand the discipline and departmental expectations. Each department or unit at Auburn University should develop guidelines for measuring outreach where some perform below the benchmark, some reach it, others exceed it, and a few become models of excellence with national and even international reputations in outreach. Departments will need to determine what are appropriate outreach activities for the discipline. What proportion of departmental personnel should be engaged in outreach? What additional resources from the central administration will this require? How will outreach be assessed within the department (i.e., will portfolios be maintained by faculty to document their work or will some other process of documentation be used)? How heavily will outreach be weighed in the departmental reward system?

Every department or unit is expected to engage in outreach of some kind, but not every individual faculty member will be expected to do so. Some departments may already be well staffed to perform their outreach function. Others may have to recruit new faculty with this expectation in mind.

Once departments have defined their outreach functions and have allocated resources and personnel time accordingly, they will need to put in place an assessment mechanism.

After this mechanism is used to assess the outreach achievement of faculty, college and university tenure and promotion committees will oversee the process as they do currently with teaching and research.

At this level, measurement must clearly differentiate the quality of outreach as the process currently does the quality of teaching and research.

Toward that end we recommend the following definitions and procedures.

CONDITIONS OF OUTREACH

A faculty endeavor may be regarded as outreach if it satisfies the following six conditions:

- A. there is a substantive link with significant human needs and societal problems, issues, or concerns;
- B. there is a direct application of knowledge to significant human needs and societal problems, issues, or concerns;
- C. there is utilization of the faculty member's academic and professional expertise;

- D. the ultimate purpose is for the public or common good;
- E. new knowledge is generated for the discipline and/or the audience;
- F. there is a clear link/relationship between the program/activities and the unit's mission.¹

An outreach program is one that is sustained over a period of time, has specific objectives and outcomes, and may involve more than one outreach model. An outreach activity consists of a single event or function. Outreach programs involve multiple such activities.

When reporting outreach to the department annually for purposes of merit pay, tenure, and promotion, the faculty member should keep in mind that outreach is not an endless list of activities, but a well-conceived program that can be illustrated by a few representative, high-quality examples.

***The ultimate purpose
(of outreach) is for the
public or common good.***

Another aspect of the reward system for outreach should include increasing university-wide recognition. At present outreach awards go largely to faculty in Cooperative Extension.

We recommend annual university awards for faculty who have been most distinguished in outreach. The Alumni Association might fund these as it presently does with awards for excellence in outreach and extension.²

The committee is also sensitive to the complaint of many faculty members that without additional funds, expectation of outreach duties on top of already existing expectations for research and teaching is unreasonable. We concur in that judgment. Yet the committee believes that at the very least, the assessment and reward system we advocate will reward those who are already engaged in successful and creative outreach programs, but who presently labor largely without recognition or reward.

INCLUSION OF OUTREACH

Obviously, inclusion of outreach as a major component of each department's responsibility requires appropriate revision of the Faculty Handbook to reflect the coequal importance of teaching, research and outreach, and their relationship to service.

¹Outreach may take place through one's own unit or through another unit of the university that is more appropriate to the outreach (i.e., an English professor might conduct outreach through the Auburn University Center for the Arts and Humanities or a professor in Veterinary Medicine through the Cooperative Extension System). Both the professor and the sponsoring unit must recognize the particular function as outreach appropriate to the mission of the unit. If no official link or sponsoring unit can be found, the function should be considered private consulting rather than university outreach.

²Editor's note: such an award program has been initiated.

REPORT APPENDICES

The appendices are designed to help faculty understand the relationship between teaching, research, outreach, and service, to establish some criteria for outreach, to offer suggestions about an outreach portfolio, and to provide specific examples of the kind of documentation necessary to measure effective outreach.

- **Appendix #1** is a matrix that defines the relationships among teaching, research, outreach, and service.
- **Appendix #2** provides criteria for assessing outreach. Such considerations can help individuals and departments determine the difference between a rigorous outreach program and single, unrelated outreach activities. The criteria also suggest the importance of methodological considerations, the ability to attract resources, and the need to measure specific benefits or outcomes of outreach.
- **Appendix #3** is a suggestion for establishing a portfolio used to document the quality of outreach for purposes of tenure, promotion, and merit pay.

Subsequent examples constitute the sorts of evaluations that might be submitted in various disciplines in order to allow adequate assessment of outreach programs.

APPENDIX #1

SCHOLARLY CONTRIBUTIONS

	Teaching and Learning	Research and Research
Type of Scholarship	With learners, develops and communicates understanding and insights; develops and refines new teaching content and methods; fosters lifelong learning behavior.	Generates and communicates knowledge and understanding; develops and refines methods.
Audiences	Learners* (also peer educators). * May include those at a distance who receive degree credit.	Peers (also students, publics, supporters of research).
Means of Communicating Scholarship	Teaching materials and methods; classes; curricula; publications and presentations to educator peers and broader publics.	Peer-reviewed publications and presentations; patents; public reports and presentations.
Criteria for Validating Scholarship	Originality and significance of new contributions to learning; depth, duration and usefulness of what is learned; lifelong benefits to learners and adoption by peers.	Originality, scope, and significance of knowledge; applicability and benefits to society.
Documentation of Scholarship	Teaching portfolio, including summaries of primary new contributions, impacts on students and learning; acceptance and adoption by peers; evidence of leadership and team contributions.	Summaries of primary contributions; evidence of significance and impact in advancing knowledge, new methods, public benefits; evidence of communication and validation by peers; evidence of leadership and team contributions

Creative Work	Outreach	Service
<p>Creative Work</p> <p>Interprets the human spirit, creates and communicates insights and beauty; develops and refines methods.</p>	<p>Synthesizes and communicates understandings, applications, and insights; develops and communicates new technologies, materials, or uses; fosters inquiry and invention; develops, refines and implements new methods.</p>	<p>Participates in governance and committee work; develops and implements new programs; serves as editor or referee for manuscripts and other creative works.</p>
<p>Various publics (also peers, patrons, students).</p>	<p>General public, including educators, students, peers, professionals, and practitioners; industry, government, business and other external entities.</p>	<p>Department, college or school, university, and other academic institutions; industry, government, business, and other external entities; professional associations and learned societies.</p>
<p>Shows, performances, and distribution of products, reviews, news reports; copyrights; peer presentations and juries; publications.</p>	<p>Demonstrations and presentations to audiences; patents; publications for users; periodicals and reports; peer presentations; and publications.</p>	<p>Offices held; committees served; administrative, editorial, and consulting services.</p>
<p>Beauty, originality, impact and duration of public value; scope and persistence of influence and public appreciation.</p>	<p>Relationship to units' mission; usefulness and originality of new or different understanding, applications, and insights; breadth, value, and persistence of use and impact on client, audience or public.</p>	<p>Relationship to academic role and departmental mission; benefits and applicability to service recipient.</p>
<p>Summaries of primary contributions, public interest, and impact, evidence of communication with publics, peer recognition and adoption; evidence of leadership and team contributions.</p>	<p>Portfolio, including description of activity or program; summaries of primary contributions, communication to users; significance and scope of use, impact, and benefits; evidence of commercial and societal value; evidence of acceptance and adoption by peers; evidence of leadership and team contributions.</p>	<p>Appointment letters; summary of contributions and evidence of impact; evidence of leadership and team contributions.</p>

APPENDIX #2

CRITERIA FOR ASSESSING OUTREACH

I. Description

A. Summary

1. Describe the nature of the activity and the participants. What human need(s), societal problem(s), issue(s) or concern(s) was/were addressed?

2. What faculty and staff were involved in the outreach activity?

3. What were the distinct benefits/outcomes produced by the activity?

B. Objectives

1. What specific objectives were accomplished?

C. Methodology

1. What methodology was employed in the activity?

2. Is the methodology a standard or generally accepted methodology in the discipline?

D. Contribution

1. What is unique about the activity?

2. What were the lessons learned that can be used with wider audiences?

E. Deliverables

1. Was the deliverable(s) of the activity a report submitted to the audience, a live presentation or telecast, a videotape, or other means of communicating the intended knowledge? Describe the deliverable.

II. Resources Used

A. Individual's Contribution

1. What contribution to the activity did the applicant make?

2. Were others involved in the activity?

B. Expertise

1. Was the expertise used in the activity specific to the applicant's discipline? Explain.

2. Was the expertise used in the activity acquired through intensive training and or research? Explain.

C. Physical

1. Where was the work performed?

2. What university-supported physical resources were used?

D. Funding

1. Who supplied the funding for the activity?

2. Was the funding intended to be a seed grant?

3. For what purposes was the funding used?

E. Other

III. Mission Compatibility

A. Unit Compatibility

1. Was the activity compatible with the university unit (i.e., department, college/school mission)? Explain.
2. Did the activity complement the teaching and research missions of the unit? How?

B. Discipline Compatibility

1. How was the activity compatible with the applicant's discipline?
2. Did the activity demonstrate linkage between the discipline and the societal/human problems? Explain.
3. What new knowledge was generated for the discipline and/or audience?

IV. Impact

A. Description of the Audience

1. What are the distinguishing attributes of the audience?
2. How many individuals were impacted by the activity?

B. Quantitative Results

1. Direct Beneficiaries (client)
 - a. What short-term (less than 1 year) quantitative results describe the impact on the client (e.g., jobs, profit, costs, waste, etc.)?
 - b. What is the long-term (more than 1 year) impact on the client?
2. Indirect beneficiaries
 - a. What groups will indirectly benefit from the activity (e.g., Federal, state, and local governments)?
 - b. How will these groups benefit (e.g., increased tax revenues, secondary jobs created)?

C. Qualitative Results

1. Direct Beneficiaries
 - a. What qualitative benefits will accrue to the client (e.g., learning a new skill, improved quality of life, appreciation of cultural event)?
2. Indirect Beneficiaries
 - a. What evidence exists that the local public response was favorable (e.g., critical reviews by knowledgeable scholars/critics)?
 - b. What evidence exists that the activity resulted in national or international impact (e.g., publications in journals)?
 - c. How can the activity benefit other groups indirectly (e.g., demonstrating the activity to students enrolled in courses)?

APPENDIX #3

THE OUTREACH PORTFOLIO:

A Tool for Evaluating Outreach and the Improvement of Practice

Adapted from David G. Way 'The Teaching Portfolio'

The idea of an Outreach Portfolio grows out of the conception that outreach is an integral part of academic scholarship, which also includes teaching, research, and professional and public service. An Outreach Portfolio would include both work samples of one's outreach activities (plans, videotapes, evaluations, etc.) and reflective commentary on those samples which help explicate their meaning within a specific context.

By beginning an outreach portfolio as an incoming faculty member, an individual gains in two very important professional areas. First, it is a very effective and comprehensive way for an individual to document what is unique about one's approach to outreach which can be used during performance evaluations. Second, the process of building a portfolio encourages the improvement of practice because it fosters the idea that outreach is scholarly work which requires data collection and reflective analysis and synthesis of that data. The process of building a portfolio can in itself improve one's outreach.

The Outreach Portfolio would enable faculty members to display their outreach accomplishments for examination by others. And, in the process, it would contribute both to sound personnel decisions and to the professional development of individual faculty members. It is a factual description of a professor's major strengths and outreach achievements. It describes documents and materials which collectively suggest the scope and quality of a professor's outreach performance. The Outreach Portfolio connects summative and formative evaluation functions in a single process; it honors outreach as a scholarly activity; it is a practical and efficient way to document outreach and its development over time.

The Outreach Portfolio should be representative enough that the key dimensions of outreach as a scholarly activity are evident. When outreach is defined as scholarship, it entices future scholars. At the same time the portfolio is representative, it is also selective. Criteria for inclusiveness must be established which limit the range and form of data to a manageable amount. This process of selecting should preserve the criterion of representativeness of primary outreach responsibilities yet reduce and transform the available data into a manageable form which preserves a sense of efficiency for any subsequent evaluation process.

Selectivity is governed by the structuring of the portfolio into two major components: work samples, which consist of the details of what was done in the outreach activity and what its impact was, and a reflective commentary which extends the meaning of the work samples selected by providing a context in which to comprehend their design and choice from the professor's own point of view.

To document outreach on this level will require departments and colleges to agree upon categories and key dimensions reflecting the scholarship of outreach (as we have in the matrix, pp. 84-85). This in turn will require faculty and administrators to assume new roles. The faculty member must play a very active role in monitoring his or her outreach while colleagues must play a collaborative role.

All decisions involved in determining what is representative, what is selected for inclusion and how it is structured are intended to foster the improvement of practice. These decisions will of necessity require a thoughtful discourse about outreach between the faculty member, his or her peers, chairperson and dean (our outlines provide the initial suggestions). The intention is that the

***...outreach is
an integral part of
academic scholarship...***

activity of building an Outreach Portfolio, especially during the first six years of practice, encourages peer consultation and review, resulting in a profile of how the faculty member's outreach has developed over a period of time. This can itself lead to a kind of professional inquiry since after enough individuals have undergone the process it is possible to gain a clearer set of standards for what constitutes effective outreach.



EXAMPLE EVALUATIONS

EXAMPLE A

OUTLINE FOR DOCUMENTATION OF SCHOLARSHIP FOR FACULTY ON COOPERATIVE EXTENSION APPOINTMENT

Extension Horticulturist and Assistant/Associate Professor

I. Description

A. Summary/Situational Statement

Alabama produces a wide variety of horticultural food crops which together contributed an estimated \$98 million to the State's economy in 1995. This faculty position, with a 75% appointment as a Cooperative Extension Specialist, is responsible for translating and providing the latest, relevant research information to the fruit crop producers in Alabama that will enable them to make sound production decisions and thereby increase yields and economic contributions. The faculty member also works with multi-disciplinary teams to include economists to develop information upon which the horticultural industry can base marketing and financing decisions; entomologists and plant pathologists to conduct educational programs for the industry in pest management; with environmental scientists in advising the industry on mitigating environmental impacts of production; and with consumer educators in conducting educational programs for food processors and the public on food safety and quality.

B. Objectives

The overall objective of the programs conducted by this faculty member is to improve the economy of the State of Alabama by improving the ability of the fruit producers of the State to make decisions that are economically, scientifically, and environmentally sound. Specific objectives are set prior to each program year. They are determined through a continuous review of the literature, consultation with colleagues in the College of Agriculture, USDA, and other land grant universities, leaders in the horticulture industry, and county Extension agents; and review of international, national, and state trends. Objectives are mutually agreed upon with department head and are related to the priorities of the Alabama Cooperative Extension System and the Department of Horticulture. Specific objectives for the program year that ended in September included:

1. Enhancing the expertise of 55 county agents in better understanding commercial fruit culture and marketing practices, thereby enabling them to better serve the needs of their county clientele. (A train-the-trainer approach).

2. Improving the knowledge and understanding of soils, soil fertility and foliar analyses of at least 70 producers. These practices will permit improved plant longevity and overall performance including better yields and higher fruit quality.

3. Improving the overall level of knowledge of 30 county agents and 85 commercial producers in comprehensive fruit production management. This permits strengthening of educational programs through constant updating of industry situation and providing cutting edge knowledge.

4. Improving acceptance of innovative practices by 50 growers and increasing abilities of 40 county agents to transfer useful and timely knowledge to commercial producers. This will involve all commercial fruit areas of the state. Primary attention will be given to Chilton, Limestone, Blount, Lawrence, Baldwin, Houston, and Mobile counties.

5. Having 75 county agents using the ACENET weather program for management of horticultural and agronomic crop production, including the use of expert weather programs and better understanding the value of remote weather stations and use of the ACES Weather Board to supply year-round weather information to at least 754 producers.

6. Developing integrated pest management programs for apple and peach industries to reduce pesticide use and enhance growers productivity and economic stability.

7. Developing "weather driven" expert software on predicting peach, blueberry and other fruit development stages to enable growers to better manage farm labor and overall production management practices,

8. Providing input to EPA's decision to give full label approval for the use of Dormex on peaches in Alabama. This growth regulator replaces partial lack of chilling during mild winters.

9. Creating new knowledge in freeze protection, exotic fruits, marketing and high density training systems, growth regulators, phenology studies and other practices.

10. Improving marketing of fruit and vegetables through local and state farmers markets, the Department of Agriculture, Alabama Farmers Federation and private firms.

11. Improving fruit grading standards and marketing of 60 growers and 25 county agents statewide.

12. Improving acceptance of Alabama grown fruits and vegetables statewide.

13. Enhancing consumer awareness of the importance of fruits and vegetables in the daily diet and the importance of safe handling of fresh foods.

C. Methodology

A number of methods that education and horticultural research has proven effective in teaching and motivating adult learners and practitioners are used. In general, the faculty member uses process consultations in individual and small group settings, workshops, group presentations, computer decision tools, mass media, satellite conferencing, the development of instructional video tapes, publications, and applied research and result demonstrations. The specialist is an authority in his/her field and dispenses information in forms that can be applied by a variety of users, at times in which they need it, and with methods and in settings that will motivate them to use it.

D. Contribution

The faculty member is the primary link between horticultural research and the users of this information, the Alabama horticultural industry. He is the one person that is familiar with all aspects of fruit production in the state. He must have the ability to understand the subject area and the latest research and techniques in extension education and technology.

E. Deliverables

This faculty member provided 150 site specific consultations with growers, answered over 1,250 telephone queries, conducted five area meetings involving over 700 growers, provided in-service training to 30 county agents, authored two peer-reviewed Extension publications, and developed one software package.

Specific deliverables that helped achieve the objectives listed above included:

1. Coordinated and provided leadership to the planning and conduct of the Annual Meeting and Short Course of the Alabama Fruit & Vegetable Growers Association at Auburn. This conference is attended by over 150 individuals involved in producing, marketing and processing of the Alabama fruit and vegetable crop. (Program attached)

2. Provided a two day in-service training for 30 county Extension agents on the latest production management and marketing technology for fruit production. (Training agenda attached). County Extension agents are field faculty of the Alabama Cooperative Extension System. Most have degrees in some aspect of agriculture

and 85% have masters degrees. They take information developed by Extension faculty at Auburn and dispense it directly to local users (clienteles/adult learners) or facilitate the presentation of information from faculty directly to clientele.

3. Presented a paper on latest research and Extension programs on fruit crop production at the Southeastern Regional In-Service Training Workshop for county agents in Fletcher, N.C. (Program attached as evidence of faculty member as a regional/national authority.)

4. Assisted county agents in understanding soil and foliar analyses. Agents require a clear understanding of the data reported to fruit growers by the AU Soils Lab when they send samples to the lab for analysis in order to provide follow-up educational assistance.

5. Held 10 county meetings throughout the state from December through April. Over 250 growers attended.

6. Authored two new publications and revised another that were used as texts for county meetings. (Copies attached.)

7. Authored four issues of a timely newsletter on fruit production management that were sent to 2,200 agents, growers and others that were interested in the horticulture industry. (Copies attached.)

8. Convinced five new growers, with a crop value of \$750,000, to initiate an annual leaf analysis (foliar testing) program to improve fruit quality through improved nitrogen, calcium and boron nutrition involving a balance in soil and foliar applied nutrients and pruning programs. Estimated impact of this activity is \$85,000 in improved crop quality.

9. Conducted 32 orchard visits and individual consultations with growers and county agents to assess needs and formulate strategies for dealing with individual grower problems.

10. Conducted result demonstrations on evaluating new peach, nectarine, apple, pear and satsuma varieties and cultural practices for tree fruits and provided support with small fruits to show clientele value of improved practices.

(Peach cultural demonstrations in Chilton, Baldwin and Houston Counties. Peach- apple and nectarine variety demonstrations in Chilton, Baldwin and Lawrence Counties plus three substations. Blueberry cultural and variety demonstrations in Clay County.)

11. Collaborated with pomologist at three substations on studies on freeze protection systems, development of expert peach program for use in weather program, exotic fruit evaluations, training studies and related work in Houston, Baldwin, Mobile, and Chilton Counties and in developing and evaluating TVA funded apple/pear studies in Cullman and Lawrence Counties.

12. Continued weather/fruit phenology study in cooperation with National Weather Service to establish a “weather driven” expert software model on predicting peach developmental stages.

13. Continued collaboration with a plant pathologist on evaluation and implementation of Maryblyt, an expert computer program using weather data to time fire blight sprays on apples and pears.

14. Served as regional coordinator for grant funded growth regulator study on peaches in southeastern U.S.

15. Served as educational advisor to the Alabama Fruit and Vegetable Growers Association. Includes representing state organization on a national level with groups such as National Peach Council, assisting executive secretary with editing and preparing articles for the Association’s quarterly newsletter, serving as chairman for coordinating and conducting 17th Annual Meeting of the Association in Auburn, and editing the proceedings of the Annual Statewide Fruit and Vegetable Conference.

16. Faculty member served as President-elect of Southern Region American Society of Horticultural Science, his regional professional organization.

II. Resources Used

A. Individual’s Contribution

The faculty member is responsible for providing educational leadership for the fruit crop production educational and technical assistance program of the Alabama Cooperative Extension System, Auburn University. As such, he is responsible for identifying program needs and planning, developing, delivering, and evaluating programs to meet these identified needs. His program plan is his curriculum and fruit producers and county agents are his students. His educational program brings about knowledge, attitudinal, behavior, and practice changes in his students which he measures as he evaluates the impacts of his program. This faculty member expends 75 percent of his time on this educational program and the remaining 25 percent on research and departmental service.

B. Expertise

The faculty member must be a competent Ph.D. scientist in the field of horticulture and have communication skills necessary to communicate complex ideas and subject matter to a wide variety of audiences with various educational levels. He must also have a general understanding of how adults learn and can be motivated to use new technology.

C. Physical

Faculty member conducts this educational program throughout the state. Programs are held in county agents’ offices, on experiment sta-

tions, producers' farms, or anywhere it is necessary to reach the intended audience (students). Satellite conferences are produced in the ETV studio.

D. Funding

The faculty member is supplied travel, secretarial support, and supplies to conduct his program. He also augments his support through successfully competing for grants to support his applied research, demonstrations, and graduate students.

III. Mission Compatibility

Fruit crop production is one of the primary teaching and research areas within the College of Agriculture's Horticulture Department. The faculty member's outreach program takes research information from the department to users and identifies research needs for the department. The program is one of the priority programs of the Alabama Cooperative Extension System, Auburn University which is the primary source of funds for the position.

IV. Impact

A. Description of Audience

The audiences for this outreach program are the 7,500 commercial fruit orchard owners in Alabama, the 35,000 hobby and home fruit producers, chemical and pesticide dealers, farm supply stores, food processors, transporters, county Extension agents and state policy makers.

B. Quantitative Results

Three months following individual consultations producers are asked how they applied the information/recommendation received from the faculty member and how much it contributed to the success of their operation. Last year ____ producers indicated that their operations saved and/or made ____ dollars due to the information received. Over ____ percent of the ____ participants in group meetings, field days, and work shops conducted by the faculty member reported that they used the technology/information supplied at these meetings with an estimated value of _____. Data on pesticide sales in Alabama indicate increases/decreases in correlation with faculty member's educational programs. Decisions of FDA, EPA, and other regulatory agencies can be correlated with input received from the faculty member. Number of repeat requests for assistance and information indicate satisfaction with value and quality of assistance received. Workshop and conference evaluations and surveys of agents regarding faculty member's program are indicators of impact.

C. Qualitative Results

Consumers have lower priced, better quality, and safer fruit. Environmental benefits are derived because of safer production practices used by producers.



EXAMPLE B

AN ORGANIZATIONAL DIAGNOSIS OF A FERTILIZER MANUFACTURER

I. Description

A. Summary

This project identified the management problems that were limiting the growth and effective operation of a fertilizer manufacturer in Sylacauga, Alabama. The family owned company, which was founded in 1906, employed over 100 people, and generated approximately \$7 million in annual sales. A two-person team from the Auburn Technical Assistance Center (ATAC), worked with the top managers of the company to identify problems and develop solutions that would facilitate the implementation of a growth strategy. After an intensive diagnostic procedure a management action plan consisting of five major projects was developed and implemented. The projects involved job descriptions, management training, a performance management system, a management information system, and a marketing plan.

B. Objectives

The objective of the project was to prepare the company to capitalize on the growth opportunities existing in the national fertilizer market. By working intensively with the managers, the major obstacles limiting growth would not only be identified and resolved but the managers would learn through the process and be capable of resolving future problems without outside assistance.

C. Methodology

The methodology employed in the project is referred to as process consultation, whereby management consultants involve executives in the diagnosis and improvement of the organizational processes necessary for the effective operation of any organization. These processes include problem solving, decision making, communication, etc.

D. Contribution

The uniqueness of this project is that it was designed specifically to resolve critical issues facing this particular fertilizer manufacturer. Process consultation is a learning design that teaches the client to improve management practices in such a way that the need for consultation assistance for future problems is unneeded. Process consultation can be generalized and applied to any organization experiencing difficulties with organizational processes.

E. Deliverables

The deliverables in this project included a Management Action Plan that contained the diagnosis of the organization and the proposed projects necessary for realization of the growth strategy.

II. Resources Used

A. Individual's Contribution

The applicant served as the lead consultant on the project. By directing the project he was the main resource in working with the client managers. Furthermore, he mentored the junior consultant and provided a learning experience so that the junior consultant could develop the necessary expertise to engage in other process consultation projects.

B. Expertise

The expertise necessary to direct and conduct the project requires intensive training in management, including prior experience with process consultation.

C. Physical

Much of the effort was expended at the client site. Analytical effort away from the client site was provided by the physical facilities of ATAC and Auburn University.

D. Funding

The funding for this project was provided by the client as consulting revenue paid to Auburn University and ATAC.

E. Other

None.

III. Mission Compatibility

A. Unit compatibility

ATAC is an outreach unit of Auburn University. ATAC promotes and achieves the Auburn University tri-fold mission of instruction, research and outreach. The outreach mission is accomplished by providing consultative services to Alabama businesses. By improving their profitability, local, state and Federal governments benefit through higher tax revenues. The research mission is accomplished by publishing the accounts of the project in refereed journal outlets. This project was published in Long Range Planning (Armenakis, A. & Burdg, H. (1986). Planning for growth LRP, 19, 93-102). The teaching mission is accomplished by mentoring the junior consultant to gain the experience necessary to direct future process consultation projects.

B. Discipline

This project is compatible with the mission of the management discipline. The process consultation methodology employed is considered

to be within the discipline. The application of PC to this fertilizer manufacturer was performed in accordance with principles accepted by the discipline.

IV. Impact

A. Description of the Audience

The client in this project was the 15 executives and managers of the fertilizer manufacturer. However, the impact was felt by all 100+ employees.

B. Quantitative Results

1. Direct Beneficiaries (Client)

The company was able to demonstrate a growth in sales revenue. By 1988 (6 years after the start of the project), company sales reached an annual amount of \$23 million (from the initial amount of \$7 million). In 1995, sales exceeded \$100 million. The company is currently the number two fertilizer manufacturer in the lawn and garden industry. Other direct beneficiaries include the increase in employees required to generate the increase in sales.

2. Indirect Beneficiaries (Stakeholders)

Indirect beneficiaries in the project would include the Federal, state, and local governments through increased tax revenues.

C. Qualitative Results

1. Direct Beneficiaries

The executives and managers of the fertilizer manufacturer learned to improve their management project provided them with the opportunity to self-discover their discrepancies and to specifically address improving these discrepancies.

2. Indirect Beneficiaries

From this consultation project, two analytical cases were prepared and published in a book of cases on organizational change. Students exposed to these cases in management classes can benefit by analyzing the cases. These cases are a regular part of a graduate course: MN 615—Organizational Behavior and Change. Since winter 1991 approximately 600 graduate students have benefitted from this project. Furthermore, the chairman of the board and/or CEO continue to participate twice a year in working through the case with the students.



EXAMPLE C

IFAI PROFESSOR TRAINING COURSE IN GEOSYNTHETICS

Example of Portfolio Item for David J. Elton, Associate Professor, Civil Engineering

I. Description of the Outreach/Extension Activity

A. Summary

This course teaches professors from other universities. They assemble on the Auburn University campus for a week of technical instruction.

B. Objectives

To increase the usage of geosynthetics in engineering through education. The course showed university professors how to add geosynthetics instruction to their classes or teach a course in geosynthetics. The intent was to increase the amount of formal geosynthetics education graduating engineers receive before entering practice.

C. Methodology

This will be done through an intense week-long series of seminars and classroom notes. The professors can then integrate these notes into existing classes, or make a new course dedicated to geosynthetics. As professors offer more instruction in geosynthetics, graduating engineers will be able to apply this knowledge after graduation.

Academic, government and industry personnel will provide the instruction for the courses. Experts in several areas of geosynthetics design, application and installation will be featured, each developing notes that will be disseminated to the professors. Slides, videos and handouts will also be prepared to assist the professor in teaching this new material.

The course is offered free-of-charge to a limited number of professors. Selection of professors was based on their number of undergraduate students, level of interest and geosynthetics knowledge.

The courses were hosted by Auburn University.

D. Contribution

The objective was accomplished by holding the IFAI Professor Training Course.

The course is a unique university/industry cooperative effort. Both contribute to the success of the course. The University contributes: a neutral site, and expertise in outreach course development, and Dr. Elton's expertise in geosynthetics instruction and knowledge of academics and course development. Industry provides: course content guidance, oversight of course development and funding.

Note that only trade organizations fund the course. No individual industries provide funding, to preserve impartiality.

The course material is developed to be taken home by the attendees and used directly. The custom notes for this course are developed for immediate integration into the professors' classroom notes. Thus, the instruction and handouts are specifically for immediate use in the classroom.

E. Deliverables

1. Five days of live detailed instruction by six professional instructors.
2. Detailed modular course notes, suitable for classroom use. This mode makes it easy to integrate geosynthetics into Civil Engineering curricula.
3. Geosynthetics samples.
4. Government design manuals.
5. Case histories book.
6. Two-volume geosynthetics bibliography .
7. Textbook Tips for teaching geosynthetics.
8. Slides.
9. Videos.
10. Previous geosynthetics conference proceedings (approx. 7 cubic feet of material).

In addition to the notes, participants will receive enough other, general material that could be combined with the above notes to form an individual course devoted to geosynthetics. Such a course is useful in drawing student attention to geosynthetics.

The Auburn University Textile Engineering Department's geosynthetics laboratory is available at no cost, and ran demonstration tests including tensile, puncture, burst tests, and pullout testing. The demonstration included information on setting up a geosynthetics lab, equipment specifications, and purchasing advice.

II. Resources Used

A. Individual's Contribution

Dr. Elton was the key to the development and completion of the course. He initiated the course idea, sought, found and convinced the sponsors to contribute, developed the course agendas and found the speakers and convinced them to come.

His knowledge of the material, knowledge of faculty that could come and teach the course, ability to understand what the attendees needed to have presented and take home with them were key to the success of the course.

Dr. Elton's time was the primary resource. He devoted efforts to oversee the course note development, selection and assembly of handouts (texts, manuals, samples, videos, slides and demonstrations).

The sponsors were able to supply most of these materials. Dr. Elton's knowledge of the needed materials, and where to get them were key to the assembling of the handouts. His familiarity with the industry, which supplied all the geosynthetics samples, led to the acquisition of all the samples.

The Auburn University Engineering Extension Service provided time, effort and experience. All three were required to make the course go smoothly. The outstanding personnel were the key to the success of the administration of the course.

B. Expertise Required to Run the Course

1. Domain knowledge.
2. Organizational ability.
3. Knowledge of university professors' goals and aspirations (to make the course suit their needs).
4. Knowledge of sponsors' goals and aspirations (to make the course suit their needs).
5. Ability to convince sponsors to fund the course.
6. Ability to convince instructors to prepare detailed notes, and then come to Auburn to teach for very little reimbursement.

C. Physical Resources

The course was hosted by Auburn University, in Auburn, Alabama, a 90 minute drive from Hartsfield International Airport in Atlanta, GA.

The Auburn University Hotel and Conference Center is ideal for hosting the IFAI Professor Training Courses for Geosynthetics.

Hotel and conference facilities were required, with the attendant resources.

D. Funding

The sponsors are:

1. North American Geosynthetics Society	\$3,500
2. PVC Geomembrane Institute	3,000
3. Erosion Control Technology Council	3,500
4. Geosynthetics Institute	3,000
5. Industrial Fabrics Association International	
Geotextile Division	15,000
Geomembrane Division	3,500
General	5,000

TOTAL \$36,500

III. Mission Compatibility

A. Unit (to Include Synergy with Teaching and Research)

This Course serves the Auburn University Civil Engineering Department's mission of providing outreach education.

The knowledge of the material learned by Dr. Elton enhanced his idea base for generating research.

The intercourse with other skilled geotechnical faculty enhanced each faculty's ability to teach, as we learned from each other. Similarly, the research ability was enhanced. The teaching ability of Dr. Elton is enhanced by interfacing with other geotechnical teachers.

B. Discipline

The course serves the discipline thus:

1. Expands geosynthetics use, resulting in more economical designs.
2. Expands the professions' range of practice (geosynthetics can do jobs that formerly couldn't be done).

IV. Impact

A. Description of the Audience(s)

The Course is offered free-of-charge to about 25 Civil Engineering professors. Selection of professors will be based on their number of undergraduate students, level of interest and geosynthetics knowledge. All are tenure track, and teach geotechnical courses yearly.

B. Quantitative Results

1. Direct Beneficiaries (Clients)

The limited number of professors. Their resumes are enhanced. Their usefulness to their Universities is enhanced.

The Auburn University Engineering Extension Service conducted daily reviews of the instructors by the attendees. All reviews were very favorable.

The Auburn University Engineering Extension Service conducted a post-course survey. The results were very favorable to the course conduct, content and instructors.

Many attendees expressed gratitude (during and after the course) for the quality of the course content, the instructors, the handouts, and the venue.

Dr. Elton continues to receive requests for applications for the next year's course, indicating that positive feedback has reached the market.

2. Indirect Beneficiaries (Stakeholders)

Many students, for years to come, will benefit from this course. These are the students who take a geosynthetics course from a professor who attended the IFAI Professor Training Course for Geosynthetics.

The geosynthetics industry benefits. The students will become professionals, after awhile. They will be more comfortable specifying and designing with geosynthetics, leading to increased use of this material.

C. Qualitative Results

1. Direct Beneficiaries:

The professors who take the class have learned more about this field. They are more stimulated to do something new with geosynthetics, having learned more.

2. Indirect Beneficiaries:

The universities where the professors work become indirect beneficiaries. The added prestige, research potential, ability to attract more graduate students (this is a novel, useful and interesting subject), and retain students in Civil Engineering is increased when the professor uses the knowledge gained in this course.

The geosynthetics industry benefits. The students will become professionals, after awhile. They will be more comfortable specifying and designing with geosynthetics, leading to increased use of this material.

V. Other

None.



EXAMPLE D

EXAMPLE OF PORTFOLIO ITEM

for R. D. Kilowatt, Director of Instruction and Lecturer,
Modern Power Systems Analysis Short Course

I. Description

A. Summary

Some years ago, the Southeastern Electric Exchange (Regional Association of Investor-Owned Electric Utilities) identified the need for power industry engineers to have a strong working knowledge of techniques for the analysis of power system problems and the skills needed to solve these problems using digital computer techniques. Subsequently the Exchange, through its Engineers-Educators Working Group, formulated a program to meet this need. The MODERN POWER SYSTEM ANALYSIS short course was established in 1978 and has been taught annually since that time.

B. Objectives

This is a post-graduate course for the practicing electric power system engineer seeking analytical tools to solve complex power system problems.

C. Methodology

This course is a concentrated two-week course taught by a team of fifteen highly qualified power systems instructors from universities across the southeastern United States.

D. Contribution

This course is unique in that it provides instruction in power system fundamentals that are normally covered only in several elective/graduate courses at most universities. The breadth of instructional affiliations and capabilities is totally unique for a course of this nature. Over its history, the course has spawned several shorter, more specific short courses in several different locations.

E. Deliverables

Participants in this course receive 84 hours of live instruction. Included are several workshops where the participants work on typical power system analysis problems and case studies. Several of these involve the use of the computer. The participants also receive two notebooks containing some 500 pages of desktop publishing quality class notes. Past participants indicate that these notes are excellent references for later questions concerning power system analysis.

II. Resources Used

A. Individual's Contribution

R. D. Kilowatt serves as Director of Instruction and presents lectures and conducts workshops on four different subjects. As Director of Instruction, he is responsible for organization of course content, selection of instructors and conduct of the course.

B. Expertise

Professor Kilowatt was involved in the development of this course, has taught in it throughout its 18-year history and has been the Director of Instruction since 1988. His expertise in power system analysis outreach is demonstrated by an average attendance of 36 participants per year throughout the history of the course, by the scores that he receives on participant evaluations, and by the attached abbreviated resume.

C. Physical

The course is held in Broun Hall 238. The personal computer labs in the EE Department are used for computer workshops. The facilities at the AU Hotel and Conference Center are utilized for the opening banquet and for an additional formal dinner during the second week. A graduation luncheon is held in the Foy Union. Many participants utilize the hotel facilities at the Hotel and Conference Center. During the Saturday between the two weeks of instruction, a holiday with lunch and sporting activities is provided at Still Waters resort.

D. Funding

Funding for this course comes totally from participant registration. The current registration fee is ____ per registrant. Typically the income from the course is several thousand dollars above the expenses.

III. Mission Compatibility

Electric power systems is one of the fundamental disciplines within electrical engineering. The planning, design, analysis and operation of the electric utility systems necessary to deliver electric energy on demand to the end-users reliably, inexpensively and with minimum impact on the environment is crucial to the well-being and the future development of the state and nation. This course deals with the basic fundamentals involved in this engineering practice.

IV. Impact

A. Description of Audience

This course has served 643 practicing engineers from 81 different companies. Most have been graduate electrical engineers but a few have had degrees in other engineering disciplines. Forty six AU EE graduate students have also taken the course.

B. Quantitative Results

During the 18-year history of this course, X% of the participants have rated the course as excellent overall and said that they would recommend it to their colleagues. Y% have also rated the course instruction as very good or better.

Throughout the history of this course, on the question of overall effectiveness as an instructor, the participants have consistently ranked Professor Kilowatt ____ in comparison to the other 14 faculty from ten different universities. His score on this question has averaged Z on a scale of 1 to 10 where 1 is unacceptable and 10 is outstanding.

C. Qualitative Results

Many engineers from all over the US have been introduced to Auburn University, AU Outreach, the Electrical Engineering Department and to Electric Power Systems Engineering at Auburn in particular.



EXAMPLE E

FORAGE ECOLOGY

Department of Agronomy and Soils, Project: Grazing Land Ecology and Management Training

I. Description**A. Summary**

On 28 March 1996 the United States House of Representatives added its approval to that of the United States Senate for the 1996 Farm Bill (H.R. 2854) which includes the Grazing Lands Conservation Initiative (GLCI) language as Title III, Section 386 "Conservation of Private Grazing Land." Five days later, on 4 April 1996, President Clinton signed H.R. 2854 into law. This marked the successful conclusion of nearly six years of teamwork by the National GLCI Steering Committee and its member organizations to help insure the restoration of grazing lands technical assistance as a major component of the Nation's conservation program. A key feature of Section 386 is that a voluntary program of technical educational, and related assistance be established for owners and managers of private (non-federal) grazing lands and the assistance be provided by persons trained in pasture and range management. I was invited by the Natural Resources Conservation Service (NRCS) to develop and coordinate a training course in the ecology and management of grazed land for their field personnel in Alabama.

B. Objectives

This is a post-graduate course for NRCS field personnel who will be assisting cattle producers with technical and educational assistance.

C. Methodology

This is a one-week course taught by a team of fifteen instructors in the areas of forage ecology, production, and management, weed science and management, animal science, veterinary medicine, livestock marketing, agricultural economics, environmental engineering, forestry, and wildlife. Videos, slides, additional handouts, and computer-assisted presentations are used for individual presentations.

D. Contribution

This course is the result of a cooperative agreement between the NRCS and Auburn University. It is one of the first courses developed in grazing land ecology and management that is relative to environments found in the Southeast. Two additional southeastern states (GA and MS) have inquired about the course as a model for courses being developed for their field personnel. I have been invited to pres-

ent a discussion of the course philosophy and contents to a joint meeting of the Mississippi Cattlemen's Association, the state office of the NRCS in Mississippi, and research and extension personnel at Mississippi State University. The course also serves as a foundation for future training in use of the Grazing Land Applications (GLA) software.

E. Deliverables

Participants in the course receive 32 hours of live instruction. Included in this are two field trips where participants observe ecology production research and demonstration projects and developments related to both forages and grazing animals. Participants receive a ten-section resource training manual that includes a detailed outline of the topics to be presented in each section. These outlines are designed so that notes may be taken directly in the text. The resource manual also includes 55 Extension Bulletins and Circulars, 21 USDA Technical Guides, and references to other handbooks and circulars. This manual is intended to be used by field personnel as they work with producers to develop grazing plans and developments. Past participants indicate that they have used this information extensively since the training session.

II. Resources Used

A. Individual's Contribution

I serve as course coordinator and present lectures on four different topics. As coordinator, I have been responsible for course organization, course content, selection of instructors, and assembly of the resource manual.

B. Expertise

I was invited to develop the course since I have a background in forage ecophysiology and range ecology. This background includes extensive knowledge of the ecology and physiology of warm-season perennial grasses, both native and introduced; experience with forage and range research; teaching experience in Forage and Range Management, Range Ecosystem Function, Range Developments and Improvements, Livestock Production on Range and Pasture, Crop Science, and Crop Ecology.

C. Physical Resources

The course is held off campus at the Quality Inn Conference Center. The NRCS supports room and board for all participants. Field trips are held at the Alabama Agricultural Experiment Station Plant Science Research Center on the Auburn Campus and the E. V. Smith Research Center in Shorter.

D. Funding

The cooperative agreement set up between Auburn University and the NRCS is the source of funding for the resource manuals and personnel support for development of the course. The amount of the agreement was \$40,000.

III. Mission Compatibility

This course serves the Department of Agronomy and Soils' mission of providing outreach education to natural resource and agribusiness professionals. Enhancement of the economic and environmental sustainability of cattle production in the Southeast is needed to maintain viability of the industry. Alabama livestock producers are in need of access to technology that will allow them to maintain sustainable operations. This course offers natural resource professionals a background for technology transfer activities.

IV. Impact

A. Description of Audience

This course is designed to train the 150 field personnel currently employed by the NRCS in Alabama. Plans include development of the course into a self-taught format so that new employees could use the information immediately without the need to wait until a training session is held.

B. Quantitative and Qualitative Results

1. Direct Beneficiaries:

Natural resource professionals who participate; instructors for the course. Course evaluations at the end of each session have documented the participants high rating of the course.

2. Indirect Beneficiaries:

Cattle producers who receive technical assistance; citizens of Alabama who will benefit from enhanced environmental and economic stability in the cattle industry.



BIBLIOGRAPHY

1. Auburn University Twenty-first Century Commission. 1993. *Policy Recommendations for Auburn University Extension/Outreach*. (Auburn University, Ala.).
2. Auburn University Institutional Self-Study Report, 1991-1992. (Auburn University, Ala.).
3. Boyer, Ernest L. 1995. *How Can Scholarship Be Properly Assessed?* ASEE PRISM. March 1995.
4. Breneman, David W. 1993. *Higher Education: On a Collision Course with New Realities*. Association of Governing Boards of Universities and Colleges. AGB Occasional Paper No. 22. (Washington, D.C.).
5. Clemson University. 1994. *A Case Study: Expanded Outreach at Clemson University - A report to NASULGC*. Clemson University Planning Office. (Clemson, S. C.).
6. Cornell University Report of Study Group 5: Outreach, Extension, and Public Service. 1993. (Cornell, N. Y.).
7. Goodstein, Leonard D., Nolan, Timothy M., and Pfeiffer, J. William. 1993. *Applied Strategic Planning: A Comprehensive Guide*. (McGraw-Hill, Inc., New York).
8. Iowa State University. 1996. *Components of a Comprehensive Professional Practice and Extension Evaluation System for the College of Liberal Arts*. (Iowa State University, Ames, Iowa).
9. Jordan, Bryce. 1995. National Association of State Universities and Land-Grant Universities. Commission on Food, Environment and Renewable Resources Plenary Session White Paper: *Maintaining Public Trust in the New Century: A Land-Grant Imperative*. (NASULGC, Washington, D.C.).
10. Lee, Jo Ann, Dastella, Dawn M., and Middleton, Silvia G. 1997. "Faculty Perceptions of Academe's Evaluation System." *Journal of Engineering Education*, pp. 263-67. July 1997.
11. Lynton, Ernest A. 1995. *Making the Case for Professional Service*. (American Association for Higher Education, Washington, D. C.).
12. Lynton, Ernest A. and Elman, Sandra E. 1993. *New Priorities for the University*. (Jossey-Bass, San Francisco).
13. Magrath, C. Peter. 1992. *The New Land Grant Model: New Wine in 21st Century Bottles*. Paper presented to the Harvill Conference on Higher Education. (University of Arizona, Tucson, Ariz.).
14. Michigan State University. 1995. *Points of Distinction: A Guidebook for Planning and Evaluating Quality Outreach*. (Michigan State University, East Lansing, Mich.).
15. Michigan State University. 1993. *University Outreach at Michigan State University: Extending Knowledge to Serve Society*. A Report by the Provost's Committee on University Outreach. (Michigan State University, East Lansing, Mich.).
16. Oregon State University. 1995. *Promotion and Tenure Guidelines*. (Office of the Provost and Executive Vice President, Corvallis, Oregon).

17. Sauser, W. I. And Foster, R. S. Jr. 1991. *Comprehensive University Extension in the 21st Century*. In R. R. Sims and S. J. Sims (Eds.), *Managing Institutions of Higher Education into the 21st Century: Issues and Implications* (pp. 157-177). (Greenwood Press, New York).
18. Thompson, A. E. and Sauser, W. I. 1992. Presentation to the Twenty-first Century Commission: *Auburn University Extension — A Vision for the Twenty-First Century*. (Auburn University, Ala.).
19. University of Illinois. 1993. *A Faculty Guide for Relating Public Service to the Promotion and Tenure Review Process*. (Urbana-Champaign, Ill.).
20. University of Minnesota Outreach Council. 1993. *Outreach at the University of Minnesota — A Strategic Plan*. A Report to the President of the University of Minnesota. (University of Minnesota, Minneapolis-St. Paul, MN.).
21. University of Wisconsin - Madison. 1995. *Suggested Forms of Outreach Scholarship for Candidates for Promotion*. In Draft. (University of Wisconsin, Madison, Wisconsin).
22. Vitzthum, Edward F. 1993. American Association for Adult and Continuing Education. Paper presented at the Annual Meeting: *Winds of Change: Toward a Realistic Vision for the Future of Cooperative Extension*.
23. Weiser, Conrad J. 1995. *The Value System of a University — Rethinking Scholarship*. In Draft. College of Agricultural Sciences, (Oregon State University, Corvallis).

