EDITORIAL

Many people have called The American Center for the Study of Distance Education to request general information about setting up a distance education program or unit within their institutions. A commonly asked question is, "How have other institutions dealt with the task of creating a framework for the integration of distance education into their overall program?" In response to this question, DEOSNEWS is publishing The Pennsylvania State University's Report of the Task Force on Distance Education to provide our readers with an example of how one major research university is attempting to deal with this issue. Because the Report is quite long, it will be published in two succeeding issues of DEOSNEWS. This issue consists of Part 1: Executive Summary and Overview. Part 2, which includes a complete discussion of Recommendations for Action, references, and a list of task force members, will be published in the next issue of DEOSNEWS.

THE REPORT OF THE TASK FORCE ON DISTANCE EDUCATION
The Pennsylvania State University
University Park, PA
Issued November 1992

PART 1: EXECUTIVE SUMMARY AND OVERVIEW

CONTENTS

Executive Summary
Summary Of Recommendations For Action
The Task Force And Its Charge
The Report Of The Task Force On Distance Education
What Is Distance Education?
Technology And Distance Education
National Forces In Higher Education
A Changing Student Population
Technology
A Changing Economic Picture
The Force Of History And Mission At Penn State
The Historic Tradition Of Distance Education At Penn State
The Multi-Campus Structure Of The University
Research
Service

EXECUTIVE SUMMARY

The Task Force on Distance Education has focused much of its
deliberation on the central question posed in its charge by Executive Vice President and Provost John Brighton - "What role should distance education play in the future of Penn State?" We placed this question in the context of the Strategic Goals set by the University in 1990, the Guiding Principles of the University Future Committee whose charge is to develop a comprehensive sense of that future, and the Statement of the Council of Academic Deans on the Future of Penn State which was delivered to the President on September 1, 1990. We also looked at the evolving national picture of higher education in America and at the more localized circumstances of our own university. From this and extensive research on the subject of distance education itself, we have developed an answer to that question that serves as the centerpiece of this report and an over-arching statement of our belief in the place of distance education in the University. In our view, distance education will become a substantial part of the University's future regardless of this report or any actions that are taken as a result of it. We believe that the external forces of an evolving student population, the revolutionary advances in technology, and the changing economic picture for all of higher education will, eventually, bring an enhanced and expanded use of distance education methodologies into the central strategies of most major universities. We also find that there are unique and special circumstances at Penn State that predispose the University toward an augmentation of its distance education activities and that this, likely, will occur at sometime in the University's future. However, the Task Force believes that, at this moment, there is a "window of opportunity" that is open to the University that will allow it to capitalize on existing strengths and assume a position of national leadership in distance education. We believe that this could ensure the future viability of our distance education efforts, increase the quality and efficiency of many of our academic programs, bring national recognition and prestige to the University through accomplishments in this area, and serve as a source of both cost-savings and revenue generation. We also believe that if this "window of opportunity" closes before strong actions are taken, the leadership role will pass to another institution and Penn State will, likely, be cast in the role of a consumer of distance education rather than a major producer.

The Task Force firmly believes that there is a very real possibility that national and international preeminence in distance education may prove to be a prerequisite to national and international preeminence in most other areas of academic enterprise. To that end, we advance the proposition that distance education must become a central priority in Penn State's strategies for the future. We believe that the University should take all necessary steps to advance and support the use of distance education across the full range of academic pursuits and endeavors and move rapidly and aggressively to develop programs of the highest academic quality within each of its constituent units. We see this as an act of strategic necessity that touches on the future success of all academic units and, consequently, should be carried forward by a clear charge from the central administration. We have developed our report around a central goal that we believe encompasses both the importance of distance education in the University's future and Penn State's place in the future of distance education. That goal is:

To elevate The Pennsylvania State University to a position of national leadership in the advocacy, creation, and utilization of distance education as an important and beneficial force in the future of the institution and all institutions of higher learning.

The Recommendations that follow are focused on the achievement of this goal.

SUMMARY OF RECOMMENDATIONS FOR ACTION
Recommendation I: That all necessary steps be taken to elevate Penn State to a position of recognized national leadership in the field of distance education.

* We recommend that the University make leadership in distance education a primary goal in its strategic plans for the future.

* We recommend that The American Center For The Study of Distance Education at Penn State be enhanced and expanded to become the national locus for the study and understanding of distance education; the shaping of national policy for the method; the development of new program designs; assessment techniques and criteria; technological applications; and a principal force for the advocacy, development, and use of distance education throughout higher education.

* We recommend that partnerships with business, industry, and government be forged to support Penn State’s efforts in advancing the cause of distance education and to bring the University to a position of national and international preeminence.

Recommendation II: That the University create an administrative and organizational structure that encourages and facilitates the use and development of distance education in all areas of academic pursuit and endeavor.

* We recommend that all schools, colleges, academic units, as well as student support and resource units throughout the University be charged by the central administration to explore, encourage, and support the development and use of distance education and include distance education within their strategic plans in the future.

* We recommend that a unit be created under the direction of the Vice President for Continuing Education specifically charged and organized to support the development and delivery of distance education.

Recommendation III: That the University commit all resources necessary to fully develop and maintain an evolving technological infrastructure to allow distance education to become a viable, efficient, and effective component in Penn State’s future.

* We recommend that a special task force or committee be appointed by the central administration from those agencies or units within the University who possess knowledge or expertise over any aspect of the technological or practical infrastructure needed to serve an enhanced or expanded use of distance education and charged to deliver a strategic plan for the development of that infrastructure at the earliest possible date.

* We recommend that the University take whatever steps are necessary to implement the strategic plan for that infrastructure.

* We recommend that the University adopt as part of that implementation a strategy of providing adequate life-cycle funding for the technological infrastructure to assure that service levels are both maintained and responsive to ongoing technological developments.

Recommendation IV: That a system of investment in the future of distance education be established to provide support for program development and the continued growth of the method through its successful application.

* We recommend that a substantial pool of resources be assigned to the
proposed Distance Education Unit to fund program development and that a proportion of revenues generated by distance education programs or cost-saving benefits derived from their use be returned to the pool to support further and enhanced program development.

* We recommend that a proportion of revenues generated by specific distance education programs or cost-saving benefits derived from their use be returned to the schools, colleges, departments, or other academic units that participated in the support or development of those programs.

* We recommend that a portion of the revenues generated by specific distance education programs be returned to the faculty who participated in the creation, teaching, development, or design of those programs in proportion to the extent of their contribution or participation.

Recommendation V: That the University establish a clear system of incentives and rewards to encourage activity, recognize achievement, and foster continuing accomplishment in distance education at Penn State.

* We recommend that the promotion and tenure "rainbow dividers" be rewritten to specifically recognize distance education activities as being appropriate and co-equal with other recognized activities in the categories of Teaching Ability And Effectiveness, Research and Creative Accomplishment, and Scholarship And Mastery Of Subject Matter.

* We recommend that distance education activities be mainstreamed into the faculty's list of responsibilities so that a faculty member teaching, conducting research, or creatively involved in distance education sees it as part of his or her workload and not as an extra or adjunct responsibility.

* We recommend that the funding mechanism proposed earlier be used to provide financial incentives to schools, colleges, departments, and faculty to participate in distance education and return benefits whenever distance education programs generate revenues or return cost-saving benefits for the University.

* We recommend that the University create annual awards to recognize achievement in distance education and provide support for continued accomplishment.

Recommendation VI: That all necessary steps be taken to create an environment favorable to distance education that will promote its use and development while serving to change the culture of higher education at Penn State.

* We recommend that the initial thrust of the proposed Distance Education Unit be to develop demonstration projects throughout all units of the university system to clearly establish the potential use, benefit, and application of distance education within these units in service to their broad academic goals.

* We recommend that the University and the American Center For The Study Of Distance Education sponsor and promote conferences, workshops, speakers programs, and other events to inform and educate the university community about distance education.

* We recommend that the proposed Distance Education Unit identify and develop individualized programs within each major academic unit to inform and educate their faculty about distance education and bring them to a better understanding of the worth, merit, and potential benefits of the method for their particular area.
The Task Force on Distance Education was appointed on March 31, 1992 by the Vice President for Continuing Education, Dr. James Ryan, and charged by the Executive Vice President and Provost of the University, Dr. John Brighton. The charge delivered to the Task Force was to explore and examine distance education both at Penn State and in a national context, consider its potential use and application in the broad scheme of the University's future, and bring forth recommendations to address the role that distance education should play in that future.

The group, consisting of twenty-three faculty and administrators and three professional staff, was asked to consider distance education as "a serious issue and one that is very important to the University's future" and approach it with a view "to build a vision of distance education in Penn State's future." The committee was to assess the University's capacity to deliver instruction at a distance and determine what that capacity should be if distance education were brought to a level of use that, in the committee's view, was appropriate to the needs of the University. The Task Force was also asked to consider how the University should "position itself to deliver instruction at a distance between campuses and to national and international audiences."

The Task Force was given until the first of June to deliver a preliminary report with a final report due by the end of October. Although the task has been difficult and, at times, overwhelming, the Task Force has completed its work and offers this report in the hope that it will prove to be timely, accurate, and, above all, helpful.

Over the seven months of our investigation and deliberation, we have found that as our understanding of distance education grew and developed, our sense of its strategic importance to the University and its future deepened and became more pronounced. Many of us came to this assignment with only a peripheral knowledge of what distance education was, how it worked, what benefits it held for higher education, and how it could be applied to the University's strategies for the future. We also brought to the process a myriad of misconceptions and false assumptions about the methodology that were and are wide-spread throughout the University. However, as we became better informed and more knowledgeable through our research, discussion, and, most important, direct contact with functioning programs, we found that our opinions, beliefs, and ideas about distance education altered dramatically. We now believe that this method is a viable and important means of educating that should and, perhaps, must play a central role in the University's future strategies.

We also recognize, as a result of our own process, that advancing the case for distance education will be neither simple nor easy. However, we find the potential benefits that distance education offers to higher education are such that all efforts should be made to bring it into the mainstream of recognized educational activity. Consequently, we have responded to our charge with this report in anticipation that it will begin a strategic initiative towards the development and use of distance education across the University. In publishing this report we are less interested in gaining acceptance of our specific proposals than in bringing this issue to the attention of the university community and providing a first-step in what we believe will be a necessary change in the basic culture of the University. Because of this, we propose that this report be implemented in three distinct phases. In the first phase, we recommend that this report be disseminated and discussed. We also believe that before strong actions are taken, there should be a period of time spent in taking inventories of existing resources, developing an accurate picture of costs, and carrying forward a broad program of education and information to help the university community understand the pedagogy of distance education and the benefits
that it can bring to higher education. In the second phase, a comprehensive strategic plan for distance education should be developed by the central administration in concert with the constituent academic units of the University. In phase three, the strategic plan would be put into action.

**THE REPORT OF THE TASK FORCE ON DISTANCE EDUCATION**

This report calls for an enhanced and expanded use of distance education to serve the broad strategic goals set forth by the University in January of 1990. It also calls for the adoption of a new paradigm that places distance education within the core of the University's strategic priorities and provides for the encouragement, development, and utilization of distance education as a key component in all of our future planning. In the following pages, we argue that Penn State must solidify its position of national leadership in distance education and commit the necessary energy and resources to insure success in the growth and development of distance education programs. It is the contention of this task force that success in the University's over-arching goal of national and international preeminence in education, research, and service will be conditioned by and, potentially, dependent upon the success of its efforts in distance education.

This report will focus on the forces and factors that we believe advance the case for an institutional commitment to distance education. It identifies goals toward which such a commitment can aim and offers recommendations to achieve those goals. In form, this report is divided into two sections. The first deals with the nature of distance education and those forces that the Task Force believes warrant an enhanced utilization of the method. The second focuses on specific recommendations for action to advance a strategic initiative towards the expanded use of distance education.

It is the hope of the Task Force that this report will provide a foundation upon which a strategic initiative for distance education can be built. However, it is not our intent to present a final or definitive agenda for the development of distance education. Rather, the Task Force hopes that this report will serve as a starting point from which a fundamental redirection in our approach to higher education can take shape. To that end, we respectfully offer the following report.

**WHAT IS DISTANCE EDUCATION?**

Distance education, like any formal method of educating, is a means by which someone who desires to learn engages in some form of communication with someone who can educate. In distance education as in other educational programs, the learner must acquire knowledge, develop skills in using that knowledge, and gain understanding of the value and application of that knowledge in the broadest possible context. However, distance education differs from most other forms of education in that the learner and the teacher are geographically remote from one another rather than in the same room in a face-to-face situation.

Although distance education may be defined in a number of ways, this task force has viewed "distance education" as a very specific term that applies only to situations involving geographical separation, a teacher, a learner or learners, interactive communication, and the acquisition of knowledge, skills, and understanding. In this sense, distance education is not just teaching people who are at distance from the instructor nor learning from someone who is not physically present. Although both distance teaching and distance learning do take place, there is also the demand that some form of interaction exists between the teacher and learner. For this reason, educational tools like 'programmed learning texts' and 'teach
yourself books' are excluded from this and most accepted definitions of distance education. Similarly, instructional television broadcasts, audio and video taped lessons, and computer learning programs, on their own, would not be considered as forms of distance education. However, any or all of these may be part of a distance learning system if they are joined to some form of two-way communication that allows for interaction between the teacher and the learner.

Two-way communication may be established using a wide variety of media including computer communications, telephone, and postal service. Emerging technologies like interactive multi-media and fiber-optic networks are already expanding the interactive capabilities of distance education and promise to yield even greater capacity in the future.

Although distance education is similar to other forms of education, the distance education learning environment is substantially different from that of the traditional classroom and employs very different techniques and skills in the design and execution of learning programs. It is not a mere extension of face-to-face education via technologies like video or computer. One of the great misconceptions of distance education is that success and accomplishment in face-to-face teaching can simply be spread and proliferated through video broadcast or tape distribution and qualify as a workable model for distance education. To the contrary, the use of technology to increase class size or span distance without the appropriate didactic design considerations necessary for distance education usually produces diminished learning outcomes no matter how successful the source material may have been in the face-to-face classroom environment. However, the preponderance of research indicates that well-designed and well-managed distance education programs produce learning outcomes equal to those of face-to-face instruction.

A second misconception of distance education is that it is inherently inferior to face-to-face instruction or, correspondingly, that face-to-face instruction is inherently better or more successful in producing quality learning than is distance education. Again, to the contrary, research indicates that well-designed distance education programs produce learning outcomes that are equitable with the face-to-face model.

Of greater significance is the fact that, in specific applications, the learning outcomes of distance education may be markedly superior to those of the traditional classroom environment when they provide added learning benefits that cannot be obtained through traditional means. The most obvious benefit of distance education is that it can provide access and opportunity for learners who cannot obtain education due to geographic or physical isolation or other factors that preclude traditional classroom instruction. This has served as the primary reason for advancing distance education in the past. However, the evolving nature of distance education now offers a much richer program of benefits than in the past and in those benefits lie the great promise of distance education as a tool for enhanced quality, increased efficiency, and greater effectiveness in the broad picture of higher education.

The most advanced distance education programs can provide students with far greater involvement in the process of learning and allow them the exercise of far greater control over that process than is possible in many traditional learning environments. Through distance education, students can shape and design the learning environment to suit their own particular circumstances and self-direct instruction to serve their individual needs and abilities. Distance learning programs can allow students to set the pace of their learning and, consequently, improve their comprehension and skill. Students who require greater time to master material can afford themselves the opportunity to review and absorb information without the burden of "keeping up" with a class norm that determines the speed at which one must learn. In self-contained distance education programs, the constraints of time
and place can be totally eliminated and learning can proceed whenever and wherever the student chooses. External limitations such as available classroom space and scheduling opportunities can be eased or eliminated from both the student’s and the institution’s overall program of educational offering. Substantial teacher/student interaction, for many years a perceived weakness of distance education programs, is rapidly becoming an asset of the method while it grows as a liability in many of our traditional classrooms. Interactive computer-based programs can provide students with a far greater interaction than is possible in many of our over-crowded classrooms and, even in the most simplistic of distance education program designs, interaction is potentially greater than in an evolving classroom situation that increasingly depends on too-large enrollments and over-taxed instructors.

The emerging technologies of distance education also provide extraordinary opportunity to enhance learning benefits through increased efficiency in the delivery of quality instruction to the broadest possible audience of learners. Quality teachers, our greatest educational asset, are in far too short a supply to meet the demands of ever-increasing enrollments and their effectiveness is all too frequently lost in a learning environment that is not conducive to quality instruction. The technologies of distance education can be applied to increase the reach of our best instruction and create a new learning environment richer in support of instruction and of far greater capacity to expand learning opportunities than the present configuration of classroom lecture and outside readings could ever hope to be. Instructional materials that cover the breadth and depth of a particular subject can readily be made available in a single program allowing students to self-direct their learning to individualized levels of experience. Motion, sound, image, and the interplay of a wide variety of media can combine with traditional text to make learning a more interesting and challenging position for the student. In short, distance education can be far more than an alternative path for learning. It can become a new learning environment that offers increased benefits to students with vast potential for increased application across the total landscape of higher education.

Still, despite all of the potential that resides in distance education, it must not be misconstrued as either a challenge to traditional learning or a entity unto itself. It is a means of educating with certain benefits to both learners and the institutions that employ it. Its relative strengths and weaknesses lie not in the method itself but in its application. Its relative success or failure is not determined by its inherent qualities but by how it is employed in a specific situation. Like any form of education, high quality distance education programs produce high quality learning while programs of poor design and execution produce diminished results. It is a form that demands that the design, production, and distribution of programs be specifically geared to distance education learning objectives and take into account all of the special needs and requirements of individual programs. It also demands management systems and assessment tools that are carefully designed to serve the realities of study outside of the face-to-face model.

This task force believes that distance education is a most important resource that must be brought forcefully into the mainstream of activity in higher education. We believe that it is a viable and proven method of educating that compares favorably with traditional instruction and, in important applications, can actually be a superior mode. We see its benefits to both learners and the institution of learning to be substantial and believe that they will certainly increase as expertise is gained in its use and application. We see increased learning benefits to students as the primary and most compelling argument for advancing distance education. Although we also see great potential for cost-efficiency and increased effectiveness in delivery by employing this method, it is the potential to improve the quality of learning and instruction that has led the Task Force to its strong position of advocacy and support for distance education.
However, the Task Force does not see distance education as a universal panacea for all of the problems in higher education nor do we see it as a force that will or should replace traditional instruction. We believe that distance education must become a component, albeit a most important component, that needs to be added to the complex matrix of means that must be employed if we are to meet the demands of the future. Distance education is a tool, a most valuable tool, and one that needs to be used to far greater effect and profit than it has been in the past.

TECHNOLOGY AND DISTANCE EDUCATION

One of the most obvious and important facts of distance education is that it is dependent upon technology to exist as a means to educate. Since education takes place at a distance, some medium of communication must be employed to bridge that distance. However, the media employed in distance education are extremely varied and not necessarily complex or sophisticated. Learning can take place via any medium and the choice is determined by its appropriateness to the material, the cost of delivery, the availability of facilities, and the number of students who will take the course. In many applications, postal, electronic, or voice mail provide a reasonable means for communication to take place and no measurable enhancement of learning is gained by utilizing more sophisticated or expensive media. Despite the emphasis that is being placed on emerging electronic technologies, the method is not confined to expensive programming and delivery systems nor is it accurately represented by them. However, the emerging advocacy for distance education both nationally and internationally is due, in large measure, to the increased potential in the method that is being created by technology and the enhanced capacity for efficient and wide-spread use of distance education through advanced electronic delivery systems.

The technologies of communication, which lie at the core of distance education, are advancing at a rate unimaginined in even the recent past. Although distance education is but one small part of the technological revolution that is reshaping human communication, it is a central focus of that revolution and does offer enormous potential and opportunity for higher education. Of particular benefit to higher education is the enormous potential that exists in multi-media, interactive programming, and digital-based delivery systems that are rapidly becoming available for wide-spread use and application. Multi-media capabilities in instruction significantly enhance and expand learning opportunities for students. Integrated sound, motion, image, and text create a rich new learning environment awash with possibility and a clear potential to increase student involvement in the learning process. The interactive capabilities of both program and delivery systems allow for feedback, dialogue, and on-going assessment that are impossible in all but the most localized and direct applications of resident instruction. Emerging delivery systems offer the potential to extend the reach of education beyond all constraints of time and place and carry it into the work place, the learning center, and even the home within the space of a decade. In short, the quality, management, access, availability, and efficiency of education can advance significantly through the use and application of technologies, particularly those of distance education, in service to learning.

This task force finds that technology is opening-up a new frontier in higher education that offers significant promise to improve learning and make it available to an almost limitless audience of learners. Our sense is that technology will alter and reshape the entire landscape of higher education and that it is important to recognize and acknowledge this change and prepare for it as a coming fact of our strategic future. We believe that the technologies of distance education present the University with a valuable resource that can be tapped and utilized to address many of the problems that are now before us. Our contention is that those universities that
embrace these realities will gain a significant strategic advantage over their competitors and lay a foundation for future growth and stability. On the other hand, those that do not will be significantly disadvantaged and will carry additional burdens as they attempt to cope with those forces that are already acting upon higher education. The Task Force believes that Penn State must view technology as a central component in its strategic future and seize the opportunity to become a leader rather than a follower in its development and use.

NATIONAL FORCES IN HIGHER EDUCATION

The Task Force believes that there are three sweeping and pervasive forces acting upon all institutions of higher learning that are of consequence in our strategic view of the future and relate directly to the role that distance education should or, perhaps, must play in that future. Each is distinct but all are interrelated and combine to create a force for change that we believe must be acknowledged and considered in all of our strategic plans. The Task Force is convinced that these forces will reshape and redefine the very nature of higher education and that this change is already taking place. Our sense is that the future is upon us and that we must respond to it aggressively and forcefully or risk being left behind or carried along no longer in control of our destiny.

A Changing Student Population

There is clear and ample evidence to suggest that the future population of learners will be dramatically different from our past and present clienteles and that these students will have needs and carry expectations distinct and dissimilar from those for whom our present strategies were developed. All data currently available presents an evolving student body that will become older, increasingly involved in part-time rather than full-time instruction, less able and disposed to study in the resident instruction mode, and more selective in exercising their educational options than any student population in the past. This growing body of learners will be increasingly concerned with life-long learning opportunities, specific programs geared to the needs of business and industry that lie outside of traditional undergraduate and graduate instruction, and the advancement of international perspectives in education that address the needs of a global market and increasingly interdependent world order.

Obviously, this will predicate a dramatic shift in the content of higher education and the need to see content as a dynamic and evolving reality that must constantly readjust to changing needs and perspectives. While higher education has always responded and redefined itself to serve the needs of society, the process of change will escalate in the future and demand a new outlook that allows for a more rapid "turn around" in thinking so that new ideas and concepts can be brought before students as quickly as possible. Our management of knowledge and ability to absorb new scholarship must also become more "streamlined" and responsive if we are to keep pace with both the increase of knowledge and the demand for it.

However, the great adjustment that must be made will be in the context of learning and the delivery of education to students. Life-long learning will demand a completely new sense of the university and its role in society and a consequent shift in its view of the context of learning. In the future, the University must provide far greater access and availability of learning opportunities for a population that will be forced to continually balance educational needs with unshakable commitments to home, family, and the work place. This context must also allow for self-paced learning unfettered by the traditional constraints of time and place. Education will become an on-going part of life and the necessity for increased flexibility, expanded delivery, and the ability to respond to and meet the individual needs of learners must match the demands of life-long learning. In short, the
community of learners in the future will demand a new educational context, the development of new systems of delivery, and the creation of new and expanded areas of scholarship to meet their needs in a rapidly changing and increasingly interdependent world.

In the view of the Task Force, distance education is an essential and appropriate means to meet many of the needs of this changing student population and an opportunity to extend the role of higher education into new and diverse communities of learners for whom education will be a necessity rather than an option in their futures. We believe that this change is well underway but our adjustment to it has barely begun. Our sense is that this force will soon mandate a national commitment to distance education and that higher education must now begin to readjust and realign itself to address this eventuality.

**Technology**

The technological revolution brought on by the use of electronic media and information systems has entered a new and dynamic phase that is now beginning to alter our social, political, economic, and cultural landscape in ways that are not only unprecedented but are occurring so quickly that we are "swept away on the winds of change" and are finding, almost daily, that our world has changed to such an extent that it is barely recognizable. The computer has altered the very nature of how we think, do business, entertain ourselves, and interact with one another. Video has created a world of images that shape our opinions, beliefs, commerce, and even our political process. Advances in audio technology have, in less than a decade, made the phonograph an object of historic curiosity and changed the culture of listening to an individual "plugged in" activity rather than a social or communal act. Communications networks have made the world much smaller and promise to create a true "global village" with a vast common market that exists outside of increasingly ineffective barriers like national boundaries and political influence.

And now, there is the coming reality that these once distinct media will converge to form a single medium encompassing all of the functions of communication. Music is already something that we watch as well as listen to. The book is being rapidly transformed into an electronic learning tool that utilizes sound, images, and motion in addition to a printed text. Our computers now speak to us, as do our automobiles and kitchen appliances, and, in the not too distant future, they will probably allow us to talk back to them. Our world, for good or ill, is being transformed into a multi-media environment and the realities of that transformation must be acknowledged and taken into account when making any attempt to project ourselves into the future.

Technology will demand a shift in our culture from "terminal" to "life-long" learning as a norm and a fundamental reorganization of our thinking, culture, and social institutions will be necessary to accommodate this change. The culture of higher education will not be immune to these changes. The preeminence of resident instruction will certainly have to alter if higher education is to keep pace with the demands that will be placed upon it. An acceptance of the use and fundamental need for technologically-based learning will also have to become a part of higher education's strategies for the future. And planning for the future must include preparation. The programs of tomorrow must begin today if we are to be ready to participate in the future when it arrives.

Although the future is not with us, it is approaching at an alarming speed and it is imperative that we prepare for it and not be taken by surprise. This task force believes that technology, in general, and distance education, in particular, will play a central role in the future of higher education and that the University plays in that future will, to a large extent, be
determined by what is done now to accommodate technological advances. Technology will make education one of the primary "goods" in a world economy that will be characterized by change and redirection more than at any time in the past. The need for education will predictably escalate as our citizenry attempts to keep pace and informed in a world that will demand increasing expertise and experience in a world market. This task force believes that distance education will be the means by which such experience and expertise will be acquired. We see the need for a balance to be struck between the need for education and its acquisition. It is the contention of the Task Force that distance education will be the fulcrum upon which such balance will rest in the 21st Century.

A Changing Economic Picture

If there is any force that is acting upon higher education, it is the broad reality of declining resources in the face of increased demands on all areas of academic endeavor. The decline of public support, the limitations of increased revenues from tuition, and the diminished potential for raising funds in a weak economic environment are national phenomena that effect all institutions of higher learning. Strategic stances like the University's "doing less and doing it better" have become the rule after decades of strategies based on incremental growth and expansion. The reality is, simply, that there is less and will probably be less in the foreseeable future. However, the demands that are placed on great public universities like Penn State show no signs of diminishing in any reasonable proportion to declining resources. Enrollments are growing in response to the increased costs of private education and the enhanced reputations that our major universities now enjoy. Research occupies an increased importance in a society and economy driven by the demands of a global market, increased competition, and sweeping advances in technology. Academic services to business, industry, and, most important, human needs have escalated and will continue to do so as our society increasingly turns to its centers of learning for guidance and solutions to the problems of a world growing more diverse, complex, and sophisticated with each passing day. In short, although financial constraints may necessitate a stance of "doing less," the demands being placed on higher education call for it to become increasingly involved, both quantitatively and qualitatively, in those activities mandated by university commitments to education, research, and service.

If there was a central paradigm in higher education, it was formed out of the relationship between our institutions of public learning and government in the cause of increased education for the broad population. That cause persists and is becoming more important as we approach the 21st Century. However, that central paradigm is collapsing as government retreats from its long-standing role of primary partner in advancing higher education to the general population. Although the deepening problems of higher education are clearly driven by the growing resource gap created by decreased government support and collateral increases in the cost of and demand for learning, the focus of the public debate on higher education has been centered, instead, on the institution of learning itself and those perceived failures of our public and private schools to manage their affairs effectively and efficiently. The public mood, whether right or wrong, is not supportive of increased government spending to bolster our colleges and universities and there is no emerging consensus to reverse that mood. Like government itself, higher education is caught between two conflicting forces - increased demands for services and diminished resources to meet those demands - with a public unwilling or unable to address that conflict in a meaningful or substantial way.

There is now a clear need for higher education to develop a new paradigm to address its growing financial problems. New partnerships must be formed to fill the ever-widening gap between revenues and
expenditures. Rather than being based on the largess of a single powerful partner as in the past, the future of higher education will likely rest on a broad and diverse collection of partners, including government, but, with growing reliance on the private sector for substantial amounts of support. Higher education must also adapt and become more business-like in its activities than in the past. Strategic market considerations, greater cost-efficiency, and enhanced effectiveness in educational programming must become a part of this new paradigm. Entrepreneurial thinking must also become a part of our strategic planning and investments must be made, despite their difficulty, to insure that the demands of the future can be met. Higher education must, simply, reconstruct and reconstitute itself as a financially stronger and more self-reliant institution if it is to maintain its necessary position in our society.

Yet, great care must be exercised in this reconfiguration. Education cannot be seen as merely another commodity to be bought and sold in the marketplace. Learners must not become our “market” and the influence of rich and powerful clients must not pull higher education away from its devotion to intellectual excellence, the pursuit of knowledge, and service to the common good. Higher education is entering a most propitious yet delicate stage in its history and it must see this time as one of opportunity to forge a greater future and not fall prey to easy answers or seemingly simple solutions.

This task force believes that distance education can play a significant role in the complex new paradigm that must be created by higher education to insure its future success. We believe that it is an important means to increase the quality of education and research, utilize resources more efficiently, increase the effectiveness of scholarship and learning, and expand the ability to provide service. The Task Force recognizes that in order for distance education to play such a role, there will need to be a change in the basic perception of the method within the culture of higher education and a need for substantial investment. However, it is our belief that the potential is too great, the need too compelling, and the benefits too substantial not to take an aggressive stance towards the advancement of the method in higher education. It is our contention that distance education is a crucial and necessary component in any realistic plan for the future of higher education.

These three forces that the Task Force has identified create, in its opinion, a powerful case for the adoption of distance education as a central strategy in any comprehensive plan for the future of higher education. While only a part of what must be a sweeping and fundamental new strategy, distance education is clearly an important component. The Task Force believes that, as a tool for change, distance education offers the first and best response to a wide variety of needs that must be addressed and present higher education with the opportunity to emerge from a period of financial difficulty secure and, indeed, strengthened in the pursuit of its fundamental goals.

But beyond the forces of national change that strike at all of higher education, the Task Force feels that there are particular factors in the make-up and history of Penn State that intensify the case for distance education in the University and speak to an even greater commitment to the method than at most competing institutions.

THE FORCE OF HISTORY AND MISSION AT PENN STATE

The Task Force believes that beyond the call for the use of distance education as a strategic priority predicated by national forces, there are compelling reasons, unique and specific to the University, that speak to its adoption as a central component in our future planning. More important,
the Task Force believes that there is a compelling case for Penn State to move aggressively and rapidly toward a position of national leadership in distance education. Our past; our basic structure; our dedication to excellence in teaching, research, and service; and the current status of our infrastructure combine to give us a competitive advantage that should be exploited and capitalized upon to the benefit of both the University and the emerging community of learners who will seek education in the future.

The Historic Tradition Of Distance Education At Penn State.

Distance education has a long and distinguished history at Penn State and the University is recognized as one of the national leaders in both the creation and delivery of quality learning at a distance. This year, Continuing Education marks its 100th year of service to learners across the state and around the world. Independent Learning is the largest program of its kind in the nation with over 30,000 enrollments, drawing degree and non-degree students from all counties in Pennsylvania, from every state, and from 26 countries. The College of Agricultural Sciences is involved in a wide variety of distance education activities centered on Cooperative Extension and including teleconferencing, computer access to information, and the use of the AG*SAT network for satellite credit transmission. The College of Engineering offers advanced degrees in Mechanical, Electrical, and Acoustical Engineering and there are master’s degrees in both Adult and Health Education offered at a distance. These are but a few of Penn State's accomplishments in the field of distance education.

This record of commitment and achievement has provided Penn State with national and international preeminence in distance education and created an infrastructure that gives the University a substantial platform of accomplishment, experience, and expertise to build upon for the future. The Task Force believes that Penn State in a unique and enviable position to capitalize on its current strengths and assume the leadership role in the advancement of this important national interest. While competitors are emerging in both the public and private sectors, few can boast the breadth or depth of experience that the University has in distance education or can easily build to the level of development in infrastructure that the University currently enjoys. Strategically, we believe that it would be in the clear interest of the University to exploit this advantage and solidify its position of leadership in the development, delivery, and utilization of distance education for the future.

The Multi-Campus Structure Of The University

For many years, distance education technologies and programs have been successfully employed to serve the mission of "one University geographically dispersed" and build bridges across the spaces that tend to isolate and divide the 23 centers and campuses of Penn State. However, the future will certainly demand far greater interaction and interrelation between the constituent campus units than at any time in the past. The need to provide services broadly across the system will increase as the University seeks greater cost and management efficiency. The sharing of resources, the elimination of unnecessary duplication, the streamlining of administrative support, and the provision of new learning partnerships will be requisite parts of any strategic vision of Penn State's future. There is also the broad philosophic need to create a greater sense of shared identity and overcome the damaging effects of fragmentation at Penn State. If the University is to maintain its important and necessary position as the Commonwealth of Pennsylvania's premier institution of higher learning, it must strengthen the "ties that bind" it together and build upon its shared mission and vision of academic excellence.

The Task Force believes that distance education must be an important and central component of any strategy that is developed to address the needs
of Penn State's multi-campus structure. Provisions must be made for increased sharing and interaction between and among units. Initiatives must be advanced to make each unit a 'shareholder' in the broader vision of the University's future. Specific efforts must be directed at identifying academic strengths within the CES and making them available to the University-wide community of learners. The Task Force believes that distance education provides the most viable and effective platform to advance many of the goals of a more unified and interrelated university.

Research

As one of the great research universities in the nation, Penn State must be able to facilitate and advance its research mission in the most expeditious, cost-effective, and efficient way possible to maintain and enhance its position in an increasingly competitive environment. The need to access, utilize, synthesize, and disseminate information rapidly will be a central factor in the advancement of the University's research efforts. There is a demand to increase the speed at which information is moved. The technologies of the past are simply too slow to keep pace with the advances that are taking place in almost every aspect of investigation and study. Modern research is also becoming a true global activity that demands that researchers have access to one another and their expertise despite the distances created by time and geography. Overcoming 'distance' in research will be as important to its success in the future as facilities, funding, and space are in the present. There is also the very real and growing competition between research and educational interests for the limited resources that are available. In research, as in all other aspects of Penn State's future, strategies must be developed to allow for the advancement of the research mission without compromise to the other important goals of the University.

The Task Force believes that in a world increasingly dependent upon near instantaneous interaction and the global sharing of information, the technologies of distance education will be as important to the research mission of the University as they are to the educational. We also believe that distance education provides an important opportunity to advance both the educational and research missions of the University without increasing competition between them for resources. Since the technological infrastructure required for either can be utilized by both, there is an inherent benefit derived in viewing distance education as a cooperative venture that bridges traditionally divided interests. In research, as in education, distance education and its technologies are essential to a future strategy that will allow for progress towards the goal of national and international preeminence.

Service

As the Council of Academic Deans noted in its statement of September 1, 1990, it is important that the University "achieve recognition as the preeminent university in Pennsylvania and be viewed by the citizens and government of the Commonwealth as the state university and a critical resource for the well-being of Pennsylvania." Clearly, this will require an increased role in the provision of service to the state and its citizens. Since service on a state-wide basis is a matter of distance, the Task Force believes that distance education and its application to the service mission of the University will be of equal importance to the advancement of the methodology in education and research. As business, industry, government, and the populace of the Commonwealth turn to the University for guidance and solutions to the myriad of problems that they face, means must be found to both answer these calls for service and provide such service quickly, efficiently, and effectively.

The Task Force believes that distance education will be an important
and necessary tool in advancing the service mission of the University. We see the multi-campus system of Penn State as a network that reaches out across the state to provide and disseminate service as well as traditional instruction. We believe that the linkage of this system through distance education technologies will provide the University with the most efficient and effective means of delivering and managing service both to specific constituencies and to the broad base of the general population. Our sense is that Penn State can utilize this system to become the most visible, responsive, and responsible service presence in the Commonwealth. As in research and education, this task force sees distance education as the means by which much of our future in service will rely and depend upon.

------------------------------------------------------------------------
Part 2 of the Task Force Report consists of the expanded Recommendations for Action, References, and a list of Task Force members. Part 2 will be published in the next issue of DEOSNEWS.

==============================================================================