

A NEW AMERICAN UNIVERSITY: THE NEW GOLD STANDARD

**Excerpts from a white paper
to guide the reinvention of the American research university
From the Office of the President, Arizona State University**

At ASU we are developing a new model for the American research university, creating an institution that measures its academic quality by the education that its graduates have received rather than the academic credentials of its incoming freshman class; one at which researchers, while pursuing their scholarly interests, also consider the public good; one that does not just engage in community service, but rather takes on major responsibility for the economic, social, and cultural vitality of its community. Such an institution provides the best possible education to the broadest possible spectrum of society, embracing the educational needs of the entire population—not only a select group, and not only the verbally or mathematically gifted. Its success will be measured not by who the university *excludes*, but rather by who the university *includes*, and from this inclusion will come the diversity necessary for the advancement of society.

These tenets, first proposed by ASU president Michael M. Crow in his inaugural policy paper, “A New American University: The New Gold Standard” (November 2002), represent a new way of thinking about the fundamental objectives of a university—teaching, research, and public service. As it evolves during a ten-year institutional transformation process, ASU will serve as the prototype for a New American University, redefining the existing conception of the American research university, and spurring the evolution of an institutional form rooted in the past.

The vision of a New American University is guided by eight “design imperatives,” proposed by President Crow, that represent new standards for teaching, research, and public service. The design imperatives are guiding principles and were never intended to represent hard-and-fast categories—most of the aspirations and accomplishments of an academic institution do not correspond neatly to a single design imperative, but rather embrace many. And not all design imperatives could possibly be relevant to any given scholar or student or team of researchers. Their objective is to spur new thinking, suggest new possibilities, and unleash the creative potential of academic communities.

The tactical implementation of the vision is being accomplished through a comprehensive reconceptualization (“design process”) of the university, initiated by President Crow in response to a new era marked by unprecedented demographic change in Arizona, and quantum leaps in scientific discovery and technological innovation. As set forth in the April 2004 white paper “One University in Many Places: Transitional Design to Twenty-First Century Excellence,” the objective of the process is to build a comprehensive metropolitan research university that is an unparalleled combination of academic excellence and commitment to its social, economic, cultural, and environmental setting.

The principal mechanism of the design process is the empowerment of colleges and schools, a model termed “school-centrism.” The school-centric model will produce a *federation* of unique colleges, schools, academic departments, and interdisciplinary institutes and centers (“schools”), and a deliberate and planned clustering of programs on each campus around a related theme and mission. Predicated on devolving intellectual and entrepreneurial responsibility to the level of the college or school, the school-centric model calls for each school to compete for status, not with other schools within the university, but with schools around the country and around the world. Schools are encouraged to grow and prosper to the extent of their individual intellectual and market limits.

ASU has been moving at an accelerated pace to establish itself as one of the leading centers for cutting-edge interdisciplinary research in selected areas, both fundamental and applied. Consistent with the vision of the research university as a catalyst for societal change, ASU favors a research enterprise dedicated to societal relevance and socially optimal outcomes of research. ASU has embarked on a dramatic research infrastructure expansion to create more than one million square feet of new research space, moving the university closer to its goal of tripling research capacity during the next five years. As a consequence of investment in research infrastructure, an unprecedented acceleration of the research enterprise, and the aggressive recruitment of prominent faculty, the university is projecting a significant increase in both federal funding and private investment, and is exploring possibilities for collaboration with top tier institutional partners.

To a degree rarely appreciated, major research universities, whether public or private, function in a fiercely competitive environment, and in such a context, must operate with “real-world” entrepreneurial speed and ingenuity. Because ASU does not yet have the endowment resources of a more established university, and, as a public institution, has relied heavily on its annual state appropriation, President Crow has implemented what he terms a “culture of academic enterprise,” casting the university as an enterprise responsible for its own fate, while acknowledging that it is an enterprise that the state government charters and empowers, and in which it *invests*.

Research universities are concerned with a certain academic profile in their student body, and have defined their excellence by the academic qualifications of their incoming students—an input-driven model. ASU focuses instead on *outcome-determined excellence*—that is, ASU will admit students with differing interests and indicators of intelligence and creativity, even different levels of high school preparation. It may seem counterintuitive to imagine that one of the nation’s largest universities could effectively focus on the individual student, but ASU seeks to prove that burgeoning enrollment and the quality of the academic experience are not mutually exclusive. Implicit in ASU’s focus on the individual is an explicit commitment to diversity.

ASU currently enrolls almost 60,000 students on four differentiated campuses of equally high aspiration, and because of both demographic trends and the growing reputation for excellence of its undergraduate, graduate, and professional programs, the institution is growing larger. Complementing the overall reconceptualization of the institution, a comprehensive development plan is in place to guide the transformation of the campuses to create a great research university whose buildings and grounds reflect the scope and stature of a world-class institution, providing for its students a vibrant living/learning environment, and fostering an institutional culture consistent with the spirit and climate of the region, as well as its objectives for a sustainable future.

As a public metropolitan research university, the profile of the student body, the character of the research enterprise, and the scope of community engagement differ from that of other institutions. As the only major university in the heart of one of the most rapidly urbanizing metropolitan areas in the nation, a region marked by explosive population growth, demographic change, rapid development, and environmental trends that threaten its sustainability, ASU bears the additional responsibility of providing leadership for a region that lags behind comparable metropolitan areas in a number of educational, economic, and environmental indicators. And although remaining explicitly focused on its region, ASU is moving aggressively to establish a global presence. Because global engagement is critical to the advancement of a major research institution, ASU is building academic and professional collaborations beyond our national borders, focusing initially on Latin America and China.

THE GOLD STANDARD OF THE PAST

Research universities are the preeminent catalysts for societal change—no institution possesses more potential to transform society: improving the human condition, fostering sustained social advancement and economic growth, and providing us with the tools we need for better planetary stewardship. No corporation, no industry, no government agency can rival their scope and impact, because universities alone exist solely to produce and disseminate knowledge. Never before has the impact of knowledge been greater, and no institution, academic or other, has had, or continues to have, more influence than the research university. ASU is one of only 300 major research institutions in the world, and, as such, has the potential to generate new knowledge that is certain to influence almost every aspect of our future.

The American research university has contributed to the wealth and productivity of the nation, and to an astonishing degree, to advancing the health and happiness of humankind. Our cultural landscape has been defined by the creativity and scholarship that takes place in our research universities. Through their undergraduate, graduate, and professional programs our research universities have been largely responsible for educating successive generations of our nation's leaders in government, business, and industry, our educators, scientists, engineers, artists, and healthcare professionals.

The distinctively American model of the research university came into being in the nineteenth century when the German model of the elite scientific research institute, offering specialized graduate training, was “grafted” onto the traditional American undergraduate liberal arts college. Following the lead of Johns Hopkins University in Baltimore, fifteen institutions came to define the American research university: some of them private, such as Harvard, Columbia, Cornell, Princeton, and Yale; others, state and land grant universities, such as the University of Michigan, the University of Wisconsin, the University of Illinois, and the University of California; still others, new universities established through private bequests, such as Stanford, Caltech, MIT, and the University of Chicago. For the past one hundred years, these institutions have produced the vast majority of Ph.D.'s in the nation, and very nearly everyone who attends an American college or university has been taught by their graduates.

Such has been the influence of these institutions that, to this day, every university in the nation measures itself according to their standards. These universities are considered definitive prototypes, and their disciplinary departments are the departments by which all others are implicitly judged. And because academic departments tend to structure themselves to resemble those most highly ranked in their respective disciplines, academic departments tend to resemble one another across the nation, each more or less a pale reflection of some distant ideal: physics at Caltech and MIT, for example, economics at the University of Chicago, and theater at Yale. Although these institutions represent the gold standard, *it is the gold standard of the past*. The model for the New American University proposes a rethinking of the static organizational paradigms of American research universities.

THE NEW GOLD STANDARD: DESIGN IMPERATIVES FOR THE NEW AMERICAN UNIVERSITY

The design imperatives of the New American University represent a rethinking of the organizational principles on which universities have historically been based. The new imperatives reflect the needs of a world that in many ways has changed beyond recognition since the rise of the medieval universities nearly a millennium ago, and even the development of land grant universities 150 years ago. These design aspirations correspond to the explosion in knowledge production, increased specialization in academic disciplines, the rise of new disciplines, and the collapse of disciplinary boundaries that marks the past half-century.

ASU is young and dynamic—great institutions mature over the course of centuries, and although ASU traces its origins to the nineteenth century, its trajectory as a comprehensive research university does not begin until 1958. As such, ASU is one of our nation’s youngest major research institutions, yet this may turn out to be an asset. ASU has been formed—but is not bound—by the organizational principles and practices of existing research universities, and, according to the model proposed, will evolve in response to a new era marked by unprecedented demographic change, and the groundswell in scientific discovery and technological innovation.

The new design imperatives will foster a different kind of university, one that is linked to its setting and the needs of our day, one that does not measure its success on the basis of an historic and in many ways antiquated set of organizational principles. The model proposes taking the best from the existing model, because American research universities are without question the finest in the world. But the New American University is a function of its contemporary environment, rather than the replication of an organization derived in another setting and in another time. The New American University represents a new model for the American research university, one that breaks the mold that has constrained these institutions.

A SUMMARY OF DESIGN IMPERATIVES FOR THE NEW AMERICAN UNIVERSITY

DESIGN IMPERATIVE 1. ASU MUST EMBRACE ITS CULTURAL, SOCIOECONOMIC, AND PHYSICAL SETTING: LEVERAGING PLACE

Academic institutions leverage place by embracing their cultural, socioeconomic, and physical settings. Colleges and universities are situated in regions with particular heritages, cultures, and aspirations, and scholars at these institutions are uniquely positioned to address the problems of their regions, and to offer perspective on the distinct historical, cultural, social, demographic, political, economic, technological, and environmental forces shaping them. A focus on place means learning from local knowledge, as well as considering the local relevance of research. If an institution is socially embedded, meaningful and productive relationships between the university and its surrounding community, region, and state will flourish. Not least among these is the role of the research university as a primary driver for regional social change, social and cultural learning, and appropriate economic development.

DESIGN IMPERATIVE 2. ASU MUST BECOME A FORCE, AND NOT ONLY A PLACE: SOCIETAL TRANSFORMATION

Research universities are the preeminent catalysts for societal change—no institution possesses more potential to transform society: improving the human condition, fostering sustained social

advancement and economic growth, and providing us with the tools we need for better planetary stewardship. No corporation, no industry, no government agency can rival their scope and impact, because universities alone exist solely to produce and disseminate knowledge. Never before has the impact of knowledge been greater, and no academic institution has had, or continues to have, more influence than the research university. ASU is one of only 300 major research institutions in the world, and, as such, has the potential to generate new knowledge that may influence almost every aspect of our future.

DESIGN IMPERATIVE 3. A CULTURE OF ACADEMIC ENTERPRISE: ASU AS KNOWLEDGE ENTREPRENEUR

Enterprise takes many forms in the academy—it is the signal characteristic of the drive and passion that informs all groundbreaking scholarly and creative endeavor. Enterprise inspires inquiry, and fosters the originality and independence of mind that make new knowledge possible. Intellectual capital is the wellspring of a great university, and the source of its potential to transform our world. It is also the source of an institution's prosperity—those who conduct groundbreaking research, developing new knowledge and new products with commercial application, have the capacity to generate significant revenues for the university, and to encourage investment in our product. To the extent that we make an original contribution to our disciplines, or, indeed, break free from conventional disciplinary or organizational constraints, our work may be said to exhibit *enterprise*.

DESIGN IMPERATIVE 4. PASTEUR'S PRINCIPLE: USE-INSPIRED RESEARCH

The complexity of the challenges for global success that confront us makes it mandatory to balance the need for, and importance of, continuing basic research (fundamental discovery) with a research agenda focused on addressing actual and immediate problems. Much university research is necessarily esoteric because we are involved in the discovery of fundamental knowledge, but we must integrate the advancement of knowledge with the transformation of society. If academic research is to be a force for societal transformation—if we are to improve the human condition—we must consider the social implications of our research, and harness our knowledge for maximum societal benefit. This is an approach to scholarship that could be termed *use-inspired*, and will increasingly guide the ASU research enterprise.

DESIGN IMPERATIVE 5. A FOCUS ON THE INDIVIDUAL: OUTCOME-DETERMINED EXCELLENCE / A COMMITMENT TO INTELLECTUAL AND CULTURAL DIVERSITY

Our nation's research universities are concerned with a certain academic profile in their student body. They have defined their academic excellence by the academic qualifications of their incoming students—an input-driven model. ASU focuses instead on *outcome-determined excellence*—that is, we admit students with differing interests and indicators of intelligence and creativity, even different levels of high school preparation. There is no single profile to which a student seeking admission to ASU must conform. The university will not be limited exclusively to the verbally and mathematically gifted, nor the most intelligent children of the most successful families. We welcome these gifted students, but seek greater diversity in our student body. And we will judge the success of our university by the success of each student *on a case-by-case basis*. Implicit in our focus on the individual is a *commitment to intellectual and cultural diversity*.

DESIGN IMPERATIVE 6. INTELLECTUAL FUSION: INTERDISCIPLINARITY / MULTIDISCIPLINARITY / TRANSDISCIPLINARITY / POSTDISCIPLINARITY

If we are to advance knowledge in the face of its rapidly changing nature, and come to terms with the explosion of new knowledge that characterizes the academy in recent decades, a new and more fluid organization is urgently needed. Intellectual fusion is the *cognitive* norm in

scholarship, whereas the fragmentation imposed by disciplinary categories is an historical social construct, however useful. Knowledge does not fall within strict disciplinary categories, yet an institutional organization that derives from the medieval academy prevails. It is no longer sufficient to neatly categorize knowledge into disciplinary-based academic departments—the core disciplines are but one element of our intellectual identity. Accordingly, the New American University encourages teaching and research that is *interdisciplinary, multidisciplinary, transdisciplinary, and post-disciplinary, leading, where appropriate, to a convergence of disciplines, an approach that might more accurately be described as intellectual fusion.*

DESIGN IMPERATIVE 7. SOCIAL EMBEDDEDNESS: PUBLIC SERVICE / COMMUNITY ENGAGEMENT / OUTREACH

Public service—or community outreach—is intrinsic to ASU's mission as a public metropolitan research university, and central to the vision of a New American University that is linked to its region and the needs of its day; that balances its commitment to teaching with world-class research conducted for the public good; and that takes on major responsibility for the economic, social, and cultural vitality of its region. Public service has long been a defining characteristic of ASU, and we expect that commitment to grow with each coming year. Because our approach to public service is comprehensive, and because we conceive of public service in such broad terms, the extent of our commitment to the community and region is perhaps best conveyed by the concept of *social embeddedness*.

DESIGN IMPERATIVE 8. GLOBAL ENGAGEMENT: TRANSNATIONAL / TRANSCULTURAL

Because research universities bear partial responsibility for the future of our planet, there is no aspect of our teaching, research, or public service that does not possess global implication. ASU faculty members belong to an international community of scholars, and through their scholarship and creative endeavor implicitly address a global audience. Even service to the communities immediately surrounding our campuses can have bearing worldwide—through the development of innovative approaches to universal societal problems, ASU can establish programs and practices with application anywhere in the world. If we are to build an institution that proves of lasting value to the state and the nation in the centuries ahead, we must forge partnerships with peer institutions around the world, and make an institutional commitment to global engagement that is thoroughgoing.

Based on the inaugural lecture of Michael M. Crow as he assumed the presidency of Arizona State University, November 11, 2002

February 2005