The Academy and the War on Terror

During the weeks that followed the September 11th attacks on the World Trade Center and the Pentagon, many individuals examined their lives, their role as citizens of the United States and their own personal safety and futures. At the same time, the academic community began to do much the same. Universities as a resource to students, communities and governments, responded by examining their roles as academic institutions in the context of what was sure to be a new world, after the attacks.

The Structure of Universities Will Be Changing

The changing structure of universities was well underway prior to September 11th, but the changes we will see in the next decade, will make our institutions of today unrecognizable. This is a prediction of Dr. D. Allan Bromley, former science advisor to President George H.W. Bush.  

What is it that has caused these changes?

First, demands from society, including the increasing need for continuing education has resulted in a shift in focus for universities. Society is looking for concrete ideas about complex problems, forcing the university institution to seek interdisciplinary answers by combining components from a variety of traditional departments, rather than responding from individual academic departments.

In response to September 11th, the need to seek interdisciplinary solutions to homeland security is not only important but imperative. Universities which have moved in the direction of interdisciplinary research and education have a “jump” on others who have moved more slowly toward this approach to problem solving. Homeland security will inevitably involve not only the work of the traditional

1 D. Allan Bromley, Ph.D., Sterling Professor of the Sciences, Yale University, “Nicholson Medal Talk: The Future of the American Research University,” American Physical Society Spring Meeting (April 21, 2002).
disciplines, but the professional schools, such as law schools and the medical schools. The need for collaborations across disciplines is clearly demonstrated with any effort in homeland security.

Second, the reduction in foreign students is already underway. The private sector in other countries began to realize that their brain drain was benefitting the United States because when they sent their promising students off to the United States for graduate education, few returned. Now approximately 50% of all foreign students return to their countries, as more sophisticated opportunities are created for them at home. Further, a number of organizations such as the Institute of Electronic and Electrical Engineers (IEEE) and others have sought the support of the Immigration and Naturalization Service to reduce the number of foreign students entering the United States, thereby creating a job shortage and making more lucrative opportunities available to U.S. citizens. Unfortunately, there are not enough U.S. graduates to fill the jobs in the U.S. in some fields.

Since September 11th a number of changes have occurred which will make a tremendous impact on universities. Recently, the U.S. Congress proposed to dismantle the Immigration and Naturalization Service, and divide the functions into two areas: enforcement and naturalization. Concern for immigration of terrorists has heightened the concerns and review, which will result in a dramatic decrease in the number of entering foreign students. Other congressional proposals have also included background checks on foreign students which predate their arrival in the United States, making these clearances almost unobtainable. Graduate students who are admitted into the United States are faced with further background checks, also causing a decline in foreign students. These foreign students have allowed many academic programs to survive when there were no United States students to fill their slots, whereas a dramatic decrease in these foreign students will inevitably result in the wholesale closure of more and more academic programs.

Other issues which have arisen in response to legislative proposals and rulemaking, are data privacy, public information and foreign student requirements for participation in research.

Interdisciplinary approaches

Important problems cannot be solved by the traditional components of the university. Homeland security and anti-terrorism provides an opportunity for the academy to consider an interdisciplinary program which has the potential to include a broad range of disciplines including not only the health sciences and epidemiology, but also the social sciences, political sciences, languages and arts. The professional schools, such as the medical schools and law schools are an important part of homeland security.

Texas Tech University

On September 25, 2001 then-Interim Chancellor David Smith and President David Schmidly appointed a Task Force on Anti-Terrorism and Public Security for the Texas Tech University System. Among Texas’s 23 state universities, Texas Tech University was the first to propose a task force to examine how our institution could “make its resources most accessible and of greatest service to the
region and the nation.”

The nine member Task Force was made of four members from the Health Sciences Center and four members from the University, both of which are within the Texas Tech University system. (Texas has three state university systems: Texas A&M University System, The University of Texas System, and the Texas Tech University System.) I was asked to Chair the Task Force of the Texas Tech University System. The further charge to the Task Force was that we proceed with the development of a report in 30 days, and “[i]dentify existing personnel, programs, and organizations that bear most directly on the security of our nation and its citizens; [and] [e]xamine strategic plans, degree offerings, and administrative structures in light of America’s current and prospective security concerns.”

Through an electronically downloadable format, the Task Force designed a form to include activities in which each faculty was engaged in the areas of research (basic and applied), education and service (including clinical care) and in four subject areas of anti-terrorism and public security: preparedness and prevention; surveillance and detection; diagnosis and characterization; and response. The form was e-mailed to Colleges, Schools, and departments throughout the system, and to individuals upon request. On behalf of the Task Force, I attended Deans’ meetings, Department Chairs’ meetings and other Administrators’ meetings, helping to inspire interest and submissions. In order to complete an inventory in 30 days, we asked for responses within seven days. Hundreds of submissions were made by departments, and the Task Force reviewed these activities and identified areas of strength.

In our case, we identified strengths which were apparent in two major areas: West Texas Focus area and the Human Component. The West Texas Focus area including three areas: agricultural terrorism, zooterrorism (a word we coined to differentiate livestock from crops) and oil field terrorism. The Human Component was comprised of three areas of strength: environmental conditions, human health and social sciences.

After the completion of the first 30 day report, we were asked to continue our examination in the above areas and make recommendations to the Interim Chancellor and President. The next effort was to enlarge the circle of examination. The Task Force identified six specific areas to examine which focused on strengths in talent and resources within the university system. Six subcommittees were appointed:

Subcommittee on Homeland Security and Degree Programs
Subcommittee on Critical Infrastructure and Oil Field Terrorism
Subcommittee on Agro-Terrorism
Subcommittee on Zooterrorism
Subcommittee on Public Health Surveillance
Public Health-University Partnership Subcommittee

These Subcommittees were comprised of not only university expertise, but local, state and federal government representatives, as well as private sector individuals. Some of the subcommittee

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chairs were from the Task Force, while others were university faculty experts. These subcommittees were given a specific charge and asked to begin meeting in early December. They were asked to make a report to the Task Force in January, February and March, which resulted in a schedule of a reviewing a report, listening to a presentation every other week toward the development of our final report. The final report encapsulated our recommendations which were formulated at the end of each presentation. More than one hundred individuals participated in the process.

Our final report was presented April 8th, 2002 with substantive recommendations which are summarized as follows:

Establish a School of Homeland Security.
Seek federal and private sector investment for the International Center for Food Industry Excellence.
Establish coordination of public health resources for local, state, national and international interests by strengthening our partnerships and providing further support for the international components with the TTU Health Sciences Center in El Paso, Texas.
Coordinate and strengthen critical infrastructure anti-terrorism resources and talents for protecting our water supply, oil supplies and power facilities and make them available to the rural communities of West Texas. An appropriate communication plan with the rural West Texas communities should be implemented to address public concerns about terrorism.

These recommendations were the result of our narrowing of our focus closer to our centers of excellence from the broad focus areas we identified early in our study. For example, elements of talent and resources in surveillance was reflected in our international strengths; service to our West Texas area was sharpest in our resources and abilities to utilize distance learning to train small communities in anti-terrorism for critical infrastructures and oil fields. On the other hand, the original focus on zooterrorism evolved to one of food safety, where we found a center of excellence and talent in the effort to ensure the safety of our national food supply.

Comparative Study with other Universities and the War on Terror

Throughout the past year, since September 11th, many universities have examined their role in the war on terror and have taken leadership in our domestic response. There are approximately 3,000 universities and colleges in the United States, and about 800 graduate degree-offering institutions and 150 research-intensive universities. This examination includes a sampling of 50 universities, representing 26 states, and an evaluation of individual efforts to define their role in response to the 9-11 attacks. The methodology used limited the input to the institution’s website content, and conclusions that could be made, based upon that information.

The role for the universities in response to the 9-11 attacks would be expected to fall into the
usual categories of research, education and service, but the results were not that clearly categorical. Figure 1 illustrates the identified roles, and the distribution of universities who identified those roles as their predominate theme. Education, in the form of panels, symposia and courses was the predominate role identified. Campus safety and public service followed as the most frequently identified role; then values and race relations were addressed as the predominate theme. Research was much less frequently identified, and the individual losses of the university were also identified roles.

Another interesting analysis that developed in the course of the examination was the length of time during which the university was responding to the 9-11 attacks. Figure 2 illustrates the comparative timelines. Most universities (23) identified activities and plans within the first three months, only. The peak of universities activities extended through the fall semester, and then disappeared in January at the start of the spring semester. About three-fourths of the institutions had ended their activities by the end of the calendar year; but the remainder had activities and plans for the spring semester and beyond.

The substantial personal loss of universities and the role of the university in addressing that grief was evident in a substantial proportion of the universities, as illustrated in Figure 3. Responses varied from simply listing those alumni who were lost in the attacks, to detailed descriptions of the incident and the life of the alumni or faculty, to the dedication of a memorial for those lost.

Figures 4 and 5 illustrate two of the most common methods of responding for universities. The sponsorship of a blood drive or encouragement to participate in specific blood drives was a major action taken by a substantial number of universities. Religious services, which included vigils, candlelight services, fora, discussions and courses was an identified need by a substantial number of universities.

Most universities took a top-down approach to delivering the services or responses to the university community through the administration. Six universities utilized a council or task force approach to utilizing university resources and talent. The role of these varied according to that role identified by the institution, which included charges to these councils from campus safety to a comprehensive research agenda.

Conclusion

The role of the Academy in the war on terror begins with a self-examination of resources, talents and expertise. Within those broader areas, the effort to focus on the truly unique contributions that your institution can make to your area and to the nation will help to fulfill your role in research, education and service.

The efforts of the Academy have taken various forms. The case study of the Texas Tech University Task Force on Anti-Terrorism and Public Security, is a bottom-up approach to examining the role of a particular institution. Other approaches include those focused more on campus safety and less on the community, region or nation. In summary, the Academy responded within the context of the usual role of education, research and service; but demonstrated a willingness to address the immediate needs of its university community at an hour in which leadership from the Academy served a vital role in serving all Americans.