Committee IV
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## INTERNATIONAL EDUCATION

by

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## Greetings and acknowledgements

With Galileo in the news recently, I am reminded of the story of the investigation by those church officials who refused to discard the long-held theory of Copernicus. When Galileo was summoned before the Inquisition to be tried for the "heresy" of affirming the revolution of the earth, he said to the judges, "I can convince you with my telescope. Look through it and you will see the moons of Jupiter." But they refused. So convinced were they that the earth did not revolve around the sun that they would not even examine evidence to the contrary.

I mention this story because, over 350 years later, our knowledge -- and our world -- is expanding yet again, as it has countless times before and after Galileo. In the past decade alone, the international concept for scientific and educational exchange has experienced a process of transformation that promises to change our understanding of the world. It follows that our style of interuniversity cooperation will be altered. Some of these changes are obvious, others more subtle, but taken together they constitute a new educational initiative. Because no cataclysmic event, no wartime pronouncements herald these changes, they have come to us gradually, almost imperceptibly affecting the content, structure, and form of international scientific cooperation between universities.

This reflects, of course, a shift in the rationale, indeed the philosophy, of international educational enterprise since the expansionist decades of the 1950s and 1960s.

It is this new philosophy, this new approach to university cooperation that I want to discuss with you today in the hopes that we will not refuse to believe that our knowledge is expanding as did those who passed judgment on Galileo.

As all of us know, the post-war expansion in international educational cooperation drew on a powerful, almost mythical belief in the power of economic development. During this phase of scientific and educational cooperation overseas, we often found ourselves working with colleagues in a peculiar unbalanced relationship. We often arrived overseas with a package of educational goods developed in the United States to meet our needs, and then, we tried to install this package of educational and scientific skills and procedures with the cooperation of but little contribution from our hosts. We simply thought that what the U.S. university had to offer ought to work just as well overseas as it did at home.

However, the maturation of a new generation of scholars, coupled with a variety of changes in our world order, has brought about a fundamental modification of the environment for international scientific cooperation.

For example, although the relationship between major universities in developed nations and those in developing

countries is not yet one between universities with equal skills and resources, our counterparts overseas now have the sophistication to diagnose many of their own needs -- and the skill to help design programs to meet those needs. Today, the design of exchange and educational collaboration is a situation where we and they match capabilities, needs, and skills to achieve the objectives of cooperation.

Nonetheless, this modern situation is complicated by greater and greater involvement of government agencies in the process of defining and directing international educational and scientific exchange. Where earlier we might have designed a project in scientific cooperation, convinced the U.S. government of its worth, and requested cooperation from the host institution and its faculty, we now respond to project proposals substantially developed by the host government with criteria and goals matched to local educational and scientific concerns, which forces us to develop much more sophisticated cross cultural skills.

From the experience of the past decade, we know that the apparently stable, large-power dominated world of the 1950s and 1960s will not return soon. Instead, we can expect more influences, centers of power and wealth, and sources of wisdom and expertise. Whether we talk energy, nuclear arms, economic development, international debt, or social revolution; change, movement, and instability are the watchwords.

Quality and performance, nonetheless, will always do well, but unless the universities can learn how to work in new collaborative arrangements, we have no way to demonstrate the importance and utility of our resources and skills.

For example, universities think they know what research and training mean. But when we talk to our international counterparts, we often find a considerable divergence of opinion about the content and purpose of research and training. For institutions and countries engaged in the development process, research means practical research, applied research, useful research, not theoretical studies or very long-range exploratory studies. Some of our universities have quickly adapted to this approach, principally those with strong specialties in agriculture and engineering.

However, the humanities, social sciences, and sciences have had much less success in moving from the theoretical concerns of traditional university research to the practical concerns of an emerging nation's research agenda. Unless universities choose to abdicate their leadership in these fields, we must invent ways of preserving the traditional research strengths of the university while creating opportunities, incentives, and support for the pragmatic research that should accompany more theoretical pursuits. We've done enough to know how it can be done, but as our own educational support has declined, we have

tended to withdraw from the world into the ivory tower of a university mission defined centuries ago.

Because we often think of the university and university life in terms of traditional curricular patterns, and because we often allow ourselves to be tyrannized by the university calendar, our response to the training needs of our colleagues in other countries frequently proves rigid and inflexible. The goal of universities is to advance, transmit, and preserve knowledge, not to impose arbitrary boundaries around the content and pace of training.

What's more, we must guarantee that the quality of the training be outstanding, that the content be rigorous, and that the controls be strong. We need to work more closely with our colleagues overseas to develop programs in training that take place in the United States when it's needed, overseas when it's appropriate. We should look first to the appropriateness and quality of the content, last to the formalities of credit hours, course numbers, or degrees.

Our universities need to think in more complicated ways about the combinations of resources needed to deliver training and conduct research. No longer can we think in terms of collaboration between the United States and one other country. Three-, four-, or multi-directional collaboration needs to be developed.

Such complexity frightens us, but the multinational corporation does it by effective use of telecommunications, satellites, and computers. We need to redesign appropriate parts of our international research and training mission to exploit such multilateral advantages whenever it is cost effective, and we should be willing to spend some resources to learn how to do it. We may not get it right the first time, nor the second either, but by the third or fourth time, such a collaboration will bring results as long as the cooperation is genuine and the partners bring their best to the task.

One of the most difficult obstacles to achieving the goals I have outlined so briefly comes in the familiar guise of politics. Education, research, and science, while politically neutral in theory, embody such powerful skills and ideas that they automatically become subject to the political and social agendas of every society. Universities should be prepared to tolerate complex political and social environments until quality education no longer becomes possible. When quality can no longer be delivered, rejection and isolation are not the appropriate responses. Universities need to develop flexible measures to continue what can be done, discontinuing what cannot, without accepting an obligation to validate or reject some particular political or social approaches. This objective stance will prove difficult to maintain, for all universities are part of the cultures that support them and find it almost

impossible to avoid direct involvement in subjective issues. This may be the greatest challenge of them all.

We cannot, of course, survey the entire panorama of educational change and adjustment that faces us today, but it is clear that we will need to adjust our international educational activities to keep pace with a diverse, polycentric, contentious, and fast-moving world. If we meet this challenge, the opportunities for dynamic educational leadership will grow, enriching our intellectual and research capabilities and maintaining the position of higher education at the center of major issues of development.

I would like to close as I began -- with a story. I am told that high in the Alps is a stone marking the grave of a guide who perished ascending the mountain. On the stone is written these three provocative words: "He died climbing."

To be victorious does not mean that we shall never stumble or fall; that is impossible. It means that after every fall we shall rise undaunted, undefeated, undismayed, and climb, and keep on climbing, and "die climbing."