

Constraints and Strategies of Building a Global Research University in Developing Countries (DRAFT)

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Due to the dominance of the market, the changing nature of research, and the push-pull of the new electronic technologies, higher education institutions have come to a fundamental remaking process. In this remaking process, a new model of research universities has emerged. My colleague Kathryn Mohrman has made a good summary of the group's research on the characteristics and tensions of the new model. What I want to add here is that our protocols of the new model are mostly from the United States and Europe, but when we examine the issues and concerns of the model, we also take a global perspective by considering German situation, Finland's national science policy change and Chinese higher education reform as references.

The new model research universities are the product of national science policy, economic globalization, and world-wide competition. In the last 50 years, the U. S. government adopted a series of policies in science and education to promote the growth of American research universities. A great success has been achieved in the advancement of knowledge and capacity-building of the nation. This no doubt has caught world attention, and many countries have tried to shift their national science policies toward university research. Zemsky and Duderstadt have observed that both in the United States and many other developed countries, higher education institutions have come to a fundamental remaking process due to the dominance of the market, the changing nature of research, the push-pull of the new electronic technologies, the politics of diversity, and the changing nature of students demands. (p23)¹ Now in China, to reinvigorate the country with science and education has already become a national effort, and research universities are considered as the engines for economic growth.

New projects such as the "211 Project" and "985 Program" have been launched for the building of a world-class" universities. Many other middle or lower income countries, such as India and South Korea , also have changed their educational policies.

As is mentioned in our group report, there are many tensions in developing the new model of research universities. In China, there already exists a strong scientific research system: the Chinese Academy of Science. How to organize a collective model of university research in conjunction with the existing research system is a notable question. In the new mode of knowledge production, it is very hard to achieve significant scientific breakthrough in a compartmentalized research structure. Even in the United States, the development of large-scale research with so much dependence on outside resources for funding has been troubling many faculty members concerning academic freedom and creating challenges to the university. For instance, the cooperation between the Noviat's multi-national pharmaical company and UC Berkeley has caught wide attention. ²

¹ Zemsky, R. & Duderstadt, J. (2004) Reinventing the Research University: An American Perspective in Weber, L. & Duderstadt, J. (ed.) Reinventing the Research University. London: Economica pp.15-28

² Kirp. D (2003) Shakespeare, Einstein, and the Bottom Line: the Marketing of Higher Education Cambridge: Harvard University Press. P. 207.

The new model research university is very expensive. To finance such an expensive enterprise solely by public fund is extremely difficult. Current developmental trend on privatization of public higher education is directly related with this dilemma. Recently, Altbach and Balan (2006) used the term “struggles to compete” to describe the situation of “flagship universities” in lower or middle income countries in Asia and Latin America. This is very true in the case of China. Flagship universities did get special fund from the central government, but the money provided is only a fraction of the money needed. This indicates that developing countries may not have the financial capacity to build the research university with a global reach.

University autonomy is the single most important requirement for the universities to act globally. As governmental fund can not meet the need, universities must raise money from different resources. Private donors, tuition and fees, grants for research and technical innovation, profits from spin-off businesses, contracting with domestic and international corporate entities, and recruiting international students for higher fees are all possible sources. There is a clear need of policy and policy environment for universities to do so. Since 1978, Chinese higher education has experienced system expansion, diversification, decentralization and re-organization. These changes provide opportunities for system diversification and the building of research universities; meanwhile, flagship universities have grown fast in academic coverage, in graduate student enrollment and in building research capacity. But financial constraint can be easily seen.

“The bigger-the better syndrome” is clearly observed in Chinese flagship universities through the recent merging practices, but still the competitive capacity is quite limited, especially in the field of science in comparison with those a few transnational and supranational institutions. In order to enlarge university engagement in the process of global competition, strategies of cooperation and networking are widely adapted: to establish cooperative research projects, to set up student training programs jointly, and to develop regional university association in order to enhance the mutual benefits and derive optimum advantages. In doing so, public accountability has been challenged frequently. To the Chinese government, how to hold universities accountable and at the same time grant them autonomy are important concerns.

Nowadays, homogeneity of higher learning institutions has been widely discussed. Although German ideas of research in university have some influence in the formation of American research universities, they are quite different from the German ones. In China, a great effort has been made to learn from the American model. Every other year, the State Ministry of Education holds a “Presidents Forum” which invites many prestigious university presidents from the United States and OECD countries. Chinese universities are still quite different from their counterparts in the United States. But in the process of building “world-class”, Chinese universities themselves have become very much the same in academic coverage, disciplinary structures, and in defining their mission and roles. There is a need for system diversification.

What I am suggesting here is that for China and other developing countries, there is a need to further optimize the limited higher education resources, to provide more autonomy to universities, and to establish a policy environment to hold universities accountable. Given the complexity and the expenses of building a global research university, regional cooperation and collaboration may be able to provide a solution. And also in the remaking of new model of universities, policy-makers should know that

knowledge and skills that universities supply may not guarantee a solution to the most pressing social problems, such as to boom economic growth, or to protect the over-exploited environment. Or the problems might be very much simplified. On the other hand, the process of globalization of education has embraced much larger connotations than mere economic interaction, universities must accept the challenges squarely because solution to the national problems also lies in the dynamism of the universities.