

What Makes a Good University?
--- Thoughts and Suggestions

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“I’ve read it with great pleasure. It is very thoughtfully and carefully written.¹ If more people are thinking about or discussing this issue, it will bring great benefits for running a university well and successfully...Reform and development of education are rather more practicable measures and stronger actions than just talk.²” (A letter written by Premier Wen Jiabao, 11 April 2008)

¹ At least 50 people have done thorough research and careful thinking (please refer to the “Acknowledgements” section).

² Premier Wen said in his government work report on 5 March 2008, “(The government) shall implement competence-based education in an all-round way and push forward educational reform and innovation. It shall deepen reforms of the educational curriculum, the methods of teaching, the examination and recruitment systems, the system of evaluation etc., and effectively relieve the study workload of primary and high school students.” This has set out a clear direction for this year’s work. (This sentence is quoted thrice in the article.)

“Provide satisfactory education to the people”

----Hu Jintao, 29 August 2006

“One of my big concerns has been about how to educate and train more talent.” How to improve the quality of higher education? How to make a higher education institution special? Premier Wen Jiabao followed on with two other issues long held on his mind.

----People’s Daily, 28 November 2006

“What makes a good university? I think about this issue very often. Though I’ve offered some thoughts, I think it is far from enough and many problems exist in reality.....I’m looking forward to listening to you on this issue.”

---Premier Wen Jiabao’s Letter to the Author dated 14 September 2007

Abstract

In the field of higher education, higher vocational school is just as important as research-based university. Pragmatic measures must be taken to guarantee the implementation of the “vigorous development of vocational education.”

The four elements that make a good university are as follows: tangible assets, human resources, university culture and operational system. The four elements are interdependent rather than isolated from each other. While China’s higher education has achieved unprecedented progress in the past decade, not enough efforts have been made to develop the internal culture of the higher education institutions (HEIs). In fact, quite a few mistakes have been made in the areas of recruitment expansion, merging of schools, facilities construction, multi-campus, official-centred culture, assessment system and so on.

A satisfactory operational system of a university should be one under which the school can be run freely by educationists and enjoy the autonomous rights of independent thinking and free expression within the framework of the national constitution and laws. It should be ensured that **“Institutions of higher learning should be geared to the needs of society, run independently and practice democratic management in accordance with law.”** (Article 11, *Higher Education Law of the People’s Republic of China*)

This article offers some suggestions on the two major issues facing higher education institutions, i.e., the university entrance examination system and the university’s operational system.

Reform of higher education is a must. In view of this, it is necessary that governments make final decisions on some major issues. However, the active involvement and creativity of provincial/municipal-level governments, higher learning institutions, teaching staff, students and parents would be the key leading to the success of reform.

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What Makes a Good University? --- Thoughts and Suggestions

“Only world-class education can lead to world-class national strength and finally a world-class nation.” (Wen Jiabao, 20 November 2006) In the view of the author, education includes children’s education, primary and high school education, higher education, home learning and social education. In this article, only higher education issues are addressed. Higher education here refers to “education imparted on the basis of the completion of senior secondary school education” (Article 2, *Higher Education Law of the People’s Republic of China*). Institutions of higher learning are venues where higher education is imparted, generally referred to as “university” in China. In fact, Article 68 of the Education Law defines that—**“the institutions of higher learning referred to in this Law mean universities, independently established colleges (schools) and institutions of higher learning for specialties.”** These are all important components of a higher education system and the “nuts and bolts” of the world-class education required by a world-class nation.

Chapter I. Experiences of First-rate Universities of International Standing

1. First-rate universities are not necessarily research-based comprehensive universities

The United States is both one of the biggest and the best education providers in the world. It offers first-class education, which is provided not only by first-class research-based universities. There are about 4,000 higher education institutions (HEIs) in the United States, in which the gross enrolment rate is 90% plus and students on campus are about 17 million. Looking at the structure of its HEIs, 41% are two-year community colleges (roughly equivalent to vocational education in China), and 20% are junior colleges (the above 2 categories amount to over 60% of the total of US HEIs). In comparison, only 18% are comprehensive universities authorized to grant Bachelor degrees, 15% for master degrees and 6% doctoral degrees. Of the HEIs granting doctoral degrees, only half (3%) are the so-called research-based universities.

Community colleges which constitute over 40% of all US HEIs play a crucial role and give strong support to the US's social stability and sustainable economic development as well as lay the foundation for first-class education in the States. In 1997, a Harvard University leader remarked that without community colleges, Harvard University would not exist at all. If all HEIs were like Harvard University, US society would collapse. If all university graduates won Nobel Prizes, society would also collapse. The message was very clear. Society is an organic structure which requires various kinds of people and does not differentiate by rank.

President Xu Mingzhi wrote after his trip to Japan and Europe: "The fact that Japan and Germany strongly supported the development of engineering education as part of their higher education programmes was one of the most important reasons that the two nations' economies recovered quickly after the World War. Of course, engineering education does not equate to vocational education, but the underlying message is the same. We should learn from Europe's experiences and expertise in vocational and engineering education. Generally, the ratio of comprehensive research-based universities to vocational institutions and community schools in Europe is 1:9." In summary, a ladder-shaped "pyramid structure" has been formed in the field of higher education and the cultivation of talent in first-class nations.

2. First-rate universities must have clearly-defined missions and distinctive qualities

US HEIs have distinctive missions and characteristics. First of all, let's take a look at the case of Yale University. It is one of the world's greatest universities, hosting 11,454 students on campus, of which undergraduates (Yale College) account for

5,311, graduates (Graduate School of Arts & Sciences) 2,678, and other professional students (11 schools recruit students who have completed undergraduate education, such as the schools of medicine, law and music) 3,465. Yale's stated missions are firstly, to educate leaders for the nation and the whole world, and secondly, to advance, disseminate and preserve knowledge and culture. So far, Yale has produced 530 US congressmen, including US presidents George Bush Snr, Gerald Ford, Bill Clinton and George Bush Jr. What's more, many presidents, prime ministers, foreign ministers and presidents of world-class universities graduated from Yale. At first glance, the second part of Yale's mission statement seems to be only a string of words. However, on closer examination, it carries rich connotations. The phrase "disseminate knowledge" applies to all the US or even all the world's HEIs. When it comes to "advance and preserve" however, only 3% of US HEIs meet this aim. Adding "culture", only 1% fits the objective. Perhaps less than 3% of these institutions "preserve knowledge and culture,"

The second case is the California Institute of Technology (Caltech). Its mission is to "expand human knowledge and benefit society through research integrated with education." Caltech is not called a university, but an institute, as it is a very small organization. As of 2007, Caltech has 408 teaching staff and researchers (not including 232 visiting scholars), 2,086 undergraduates and graduates (not including 558 post-doctoral scholars). However, Caltech boasts 32 Nobel Prizes and 31 Nobel laureates, making huge contributions to the enrichment of human knowledge. Caltech is the best of the best in the three fields of aeronautics and astronautics, life science and physics. It stands out as a small school with big achievements.

The last case is Princeton University, ranked No. 1 in the US for eight consecutive years. At present, it has only 7,334 students, of which 4,918 are undergraduates and 2,416 are graduates. In 2006, Princeton only conferred 277 doctoral degrees and 151 master degrees (which were final, with no further pursuit of doctoral degrees). There are five times as many full-time students as full-time teachers. It has none of the three most popular schools, i.e., schools of medicine, law and business. Graduate students only make up 33% of the total. However, Princeton is no doubt one of the world's greatest universities. It utilizes limited resources and energy to provide the world's strictest undergraduate education and the most academic graduate education, which has produced 25 Nobel laureates (17 in physics) and 12 Fields Medal winners (regarded as the Nobel Prize for mathematics; there are altogether 24 winners of the Medal in the US, out of 48 in the world), ranking at the top of the world's universities.

Different missions lead to different ways of running a university. For example, Yale looks for "small leaders" who could become great leaders in the future, while Caltech prefers students with a strong will and the perseverance to solve problems, especially those with musical talent.

From the above-mentioned cases, we could draw the following conclusion:

“different universities have different missions, and therefore different operational systems with individualistic features.”

3. Four elements of a first-rate university

Tangible assets: including buildings, books, facilities, etc;

Human resources: including great teachers, students, administrative staff, etc.;

University culture: The love for teachers and the love for students;

Operational system: Educationists run the university, which enjoys autonomy, rights of independent thinking and free expression. It should operate independently and exercise democratic management in accordance with the law.

These four elements do not stand in isolation, but are interdependent.

For example, a university should be a place of intelligence. Only when the place is full of “love” can it attract talent and retain it. Talent includes both talented teachers and talented students. Each attracts the other.

The buildings of an HEI should reflect its culture and be highly accessible for academic exchanges and teacher-student interaction. Nowadays, they should also be model buildings which are energy-efficient and environmentally friendly.

Buildings should serve only the needs of the teachers and students. They should never be constructed for the sake of creating landmark architecture or “vanity projects.”

4. First-rate universities must have internal culture

A university is called a university not only for its physical existence but also for its culture and heritage. The internal culture of a university is reflected mainly in the following five aspects:

Firstly, it seeks truth with a rigorous and precise approach. The motto of Harvard University is a single word — Truth. Seek truth instead of having blind faith in authority. The culture of a university should be a culture of truth-seeking, precision and discipline. A Harvard freshman once told the president of the university, “I’ve been following your data and I believe there are some mistakes.” A newly-recruited student could tell the president: “You are wrong.” This is the Harvard culture in which minds supersede authority.

The motto of Yale University is “Light and Truth.” President Hu Jintao said in his

speech at Yale on 21 April 2006, **“Yale’s motto -- ‘Light and Truth’ -- which is a call for human progress represents the aspiration of every motivated young man and woman.”**

Secondly, it advocates academic freedom. Caltech’s motto “The truth shall make you free” rightly reflects its advocacy of academic freedom. A president of Yale once said, “We cultivate human potential through a strong commitment to free inquiry and free expression.” On 13 November 2006, during a meeting with writers and artists, Premier Wen Jiabao emphasized “freedom” nine times and quoted Marx and Engels in the *Manifesto of the Communist Party* as “the free development of each is the condition for the free development of all.”

Thirdly, it integrates theory with practice. The Massachusetts Institute of Technology is a good example with its motto being “Mind and Hand.” Nottingham University set its motto as “Sapientia urbs conditur (A city is built on wisdom),” which could be interpreted in modern language as “a university is the growth engine of a city.” For a city to grow into a metropole with international influence, it must be supported by a first-rate university. A university brings to a city not only a big leap in material and economic development but also the enhancement of its culture and ethical standards.

Fourthly, it upholds morality and gives back society. The first university in the US, Pennsylvania University, refers to morality in its motto, “Leges sine moribus vanae (Laws without morals are useless).” Furthermore, there should be thanksgiving. We give thanks for being born, thanks to parents, teachers, society, life, nature and so on. We should be humble and grateful. Thanksgiving is a required lesson of life. Thanksgiving creates a more harmonious society and a better world. Morality is also in the motto of Shanghai Jiao Tong University, “Think of its source when drinking water; Love of motherland and glory to Alma Mater.” The motto promotes both thanksgiving and love of the nation.

Fifthly, it upholds patriotism. **US national hero Nathan Hale was a Yale alumnus. He made the famous remark, “I only regret that I have but one life to lose for my country.”** Danish physicist Niels Bohr’s motto is a well-known saying of the fairy tales writer Hans Christian Andersen: “In Denmark I was born, 'tis where my home is. From there my roots, and there my world extend.” China is an ancient country with a long tradition of patriotism. Scientist Qian Xuesen and Deng Jiaxian were the paragons of patriotic intellectuals.

Premier Wen Jiabao said on 18 March 2008:

“If our country is blessed with integrity which is more precious than gold, generosity which is broader than the ocean, fraternity which goes far beyond love of oneself and morality which is higher than mountains, then it is a country of great moral strength, high ethical standards and advanced culture.”

This portrays what should be the internal culture of a university.

Chapter II. Status Quo of China's HEIs and Problems Existing

1. Overheated competition among "research-based comprehensive" universities

On 6 January 2008, the executive meeting of the State Council discussed Phase Three of the "211 Project" and defined it as the "211 Project of higher education" and "a constructive project of 100 institutions of higher learning in the 21st century." According to the *Higher Education Law of the People's Republic of China*, "higher education" and "institutions of higher learning" shall not exclude professional HEIs. We have to bear this in mind while implementing the State Council Executive Meeting decisions.

China launched the "211 Project" in 1994 and "985 Project" in 1998 with the purpose of helping a group of HEIs improve their quality to that of first-rate institutions. However, in the process of implementing the "211 Project" and the "985 Project," was the structure of HEIs in China taken into consideration? So far, the 100 "211" institutions and especially 38 of the "985" institutions are mostly comprehensive and research-based universities. Do we need and do we have enough resources to support so many comprehensive research-based universities? What's more, the number of HEIs in China authorized to confer doctoral degrees (310) exceed even that of the US (253), ranking China the biggest doctoral degree awarder. In 2007, more doctoral students graduated in China than in the US (quoted from Academician Yang Yuliang, Director of the Academic Degree Office of the State Council, *Oriental Morning Post*, 7 May 2008), but there were far fewer professional HEIs in China (1,168; Source: 2007 China Bulletin of Educational Development) than in the US (over 2,000). At the present moment, there are few professional HEIs which are up to standard in China. In the past when the "211 Project" was launched, all HEIs strove to enter the list. When the "211 Project" for professional HEIs started, candidates could not even be found! It is said that Shanghai only registered a nursing school as almost all qualified professional HEIs have been upgraded to universities authorized to confer bachelor degrees and above.

2. Lack of ladder-shaped system in the cultivation of talent

Generally in China, parents hope their children can obtain PhDs (Doctor of Philosophy), a desire which is also strongly encouraged by public opinion. Our human resource structure also rules that a PhD holder is paid more than a person with a master's degree. Recently a doctor told the author, "There is no room for you in a hospital if you do not get a doctoral degree." In contrast, in British hospitals, people with doctoral degrees only make up 10%. Of 1,185 students at the Medical School of California University, Los Angeles, 700 wish to be an MD (Doctor of Medicine) and only 485 wish to be doctorate holders engaged in medical research. Both are called doctors, but with different job responsibilities and different objectives. There is no

distinction in their social rank but an MD holder usually earns more than a PhD holder.

In recent years, more young people have been enrolled in HEIs in China as these institutions open their doors wider. But the policy discourages the development of professional HEIs. The irrationality of China's HEI entrance examination system is that only students with lower scores are sent to professional HEIs. Students go to professional HEIs as their last resort and those who do well would later follow on with a "top-up" programme to get a bachelor's degree. It is worth contemplating the phenomenon of many professional HEIs working their hardest to be upgraded to the league of universities, leading to the disappearance of professional HEIs year by year, and the difficulty of educating professionals.

Premier Wen Jiabao once said: "Vocational education is of great necessity and importance to China." (12 September 2005) and "Governments at all levels and relevant authorities should earnestly work with a sense of urgency and mission to strengthen vocational education with effective measures." (21 September 2005)

Party General Secretary Hu Jintao reiterated in the 17th Party Congress report that "vocational education should be energetically promoted." In fact, under the leadership of the CPC Central Committee and the State Council, the state has rendered great support to vocational institutions of higher learning, whether in the form of funding and material resources, or policy guarantee (e.g. the "211 Project" for professional HEIs). However, more changes are called for in policy interpretation and implementation, and in tackling existing prejudices. Efforts must be made to remedy the lack of a ladder-shaped structure in educating talents, which is due to the policy's inclination towards the cultivation of people with higher academic degrees, while neglecting the education and career development of those with less impressive academic degrees.

3. Imbalance in software and hardware construction and neglect of cultural development

The imbalance of software and hardware construction in China's universities is reflected in the great improvement of buildings and teaching facilities. Some buildings are extravagantly luxurious, far exceeding those of world-class universities in other countries.

Besides, many universities open new campuses which are located quite far from each other, which leads to students and teachers wasting a great deal of time commuting by school bus. It runs counter to best practice in managing a university. In contrast, the software development of universities is simply neglected. They lack world-class teachers and administrative staff, and have no distinctive qualities or

internal culture. They are in great need of an effective operational system within which each has a role to play. The author has visited quite a few University Towns (higher education mega centres) in China in which the new campuses of many famous universities are located, and is very disappointed. Everywhere one goes, one sees beautiful and luxurious buildings instead of students and internal cultural heritage.

There are of course some exceptions. A laudable example is the Graduate School of Qinghua University located in the University Town of Shenzhen. It is a place where teachers and students interact closely and are passionate, ambitious and far-sighted. It is truly an extension of Qinghua's motto of "self-discipline and social commitment."

Some other universities resist the temptation to develop new campuses or expand their enrolment programmes, preferring to uphold quality and individuality. One example is the China University of Science and Technology, while another is the Shanghai Donghua University.

In recent years, some universities have started to recruit academic staff from around the world. Successful cases of world-famous scholars recruited by Qinghua University and Beijing University are quite encouraging. Over six years ago, Beijing University cautiously launched a pilot programme (Yuanpei Programme) aimed at "broadly educating students." Fudan University started "broad education" comprehensively two years ago. It has learned lessons and accumulated experiences. Some HEIs are experimenting with reform of the student recruitment system (full autonomy in recruiting students). The reform should be constantly revised and improved based on the advice of high school teachers and parents.

The assessment system of HEIs, which is closely related to its academic environment, is also faced with some urgent issues. The problems come both from the internal structure of the institution and its supervisory authorities.

At present, the general practice of HEIs in China is to pay staff in two parts—salary and subsidy. As the subsidy is generally greater than the salary, some HEIs decide that part of the subsidy will not be issued until the annual assessment at the end of the year is completed. This kind of income structure may apply effectively to companies, but may incur more problems than advantages in research-based institutions.

Supervisory authorities are only interested in the number of doctoral degree programmes, academicians, key projects, papers and Chang Jiang Scholars at an institution. Cultural factors such as "a beautiful mind" have no place in the assessment. Here we quote the words of a parent of a Harvard graduate: "What is the difference between a top university such as Harvard and a common university? As of the knowledge and skills learned, there may be no big differentiation. The biggest difference lies in the education and cultivation of humanistic accomplishments. The

problem of modern education is that schools are being turned into pure knowledge stores. World-class universities value the inheritance of cultural heritage and an all-round education of students' personalities. Humanistic accomplishments are the foundation of education.”

This reminds the author of a true story:

A mother migrating from Shanghai to the United States was very puzzled why her daughter gave up Harvard and the University of California, Berkeley, for a professional HEI. As she could not persuade her daughter, she decided to spend one day visiting the institution together with her daughter. At the end of the day, she fully supported her daughter's decision and said to her daughter: “I will pay for your tuition (USD 50,000/year, compared to USD 46,000 in Harvard), while you will work to cover your own living expenses.” What did she see at the school that completely changed her mind? The humanistic accomplishments of the school!

In contrast, what do we see as we set foot today on an extravagant campus and enter a five-star hotel on the land of a university?!

4. A culture that values officialdom and administration-centred system

“Why do universities in China all look the same and have no distinctive features?”

Party Secretary Chen Weijia of the Communication University of China believes: “On the one hand, universities lack autonomy and independence from the government. On the other hand, universities abuse their autonomous rights due to the lack of real educationists among their leaders. The two factors complement each other. The risk that universities abuse their rights lead to strengthened supervision and control from the government. In turn, too much governmental intervention constrains the autonomy and creativity of universities, and discourages real educationists. In western countries, market and society work as strong binding forces and moral constraints are very effective. Therefore, their governments play a relatively weaker role and their universities seem to be much more independent. However, success can not be fully copied as different universities have different conditions. For example, full autonomy cannot be granted to all universities in recruiting their own students as the complex personal “relationship (*guanxi*)” network would drag the system down. What's more, the structure of HEIs in China is still lagging and wrong perceptions prevail. In the past decade, China has spent much more on higher education. But the culture that values officialdom has become even widespread popular in universities with universities becoming more like government agencies.

Academician Ge Molin suggests: “Efforts must be made to stop universities from being administrationized. In many aspects, universities are being turned into administrative departments of government. The **presidency of a university should be**

held by an educationist devoted to education and the administrative ranks of university leaders should be eliminated. Academicians are scholars and not government officials. They should not hold too many administrative positions. However, the administrative centre of a university is increasingly becoming the Secretariat of university leaders rather than an organ serving whole-heartedly the needs of professors, researchers, teachers and students. While state leaders of China are advocating a service-oriented government, the administrative departments of universities are moving towards bureaucracy. This is highly incongruous.

Other issues

It is undeniable that higher education in China has developed in leaps and bounds over the past decade. But problems have come hand in hand with development, which are summarized as follows:

Firstly, HEI enrolment expansion over-emphasizes the role of research-based universities and the number of graduate students.

Secondly, HEIs rush to merge with each other before thinking carefully about the features and role definitions of the post-merger institution. Some institutions have lost control just because of their size after merging and their quality is severely undermined.

Thirdly, in the process of expansion, many HEIs blindly follow the trend of constructing new buildings and developing new campuses regardless of their own conditions. This leads to huge wastages in money and material resources and goes against the most advanced concept of education.

Fourthly, the academic atmosphere is polluted by a culture that values officialdom. The relationship between teaching staff and administrative staff has been turned upside down.

Fifthly, the excessive stress on academic degrees, papers and assessment leads to an unhealthy academic atmosphere.

One of the direct consequences of the above-mentioned problems is the difficulty of university graduates in finding jobs.

The problems are mainly caused by flaws in the system and in perceptions. In perception, there exist misunderstandings about higher education and the components of first-rate universities. As for the system, the biggest flaw is the lack of autonomy of professors.

Chapter III. Thoughts on How to Run a University Well

1. Social education and cultural atmosphere of a university is very important

Why has Yale University been able to produce so many state and world leaders?

It is because of their student-friendly system which learns from the UK practice of assigning students to different colleges with tutors and halls of residence. “We learn from the UK and copy the best part from them,” said the president of Yale. “All those students who became presidents later were those who assumed leadership roles in various kinds of student societies.

“Social work is a very important form of education and training. It is the ‘Second Classroom’.” Future presidents and other leaders (including academic decision-makers) are trained in these organizations. “We have 250 societies and therefore 250 ‘small’ leaders. Out of ‘small’ leaders, we will have great leaders,” said a Yale leader. Princeton University’s student body is only 64% of Yale’s, but it has over 220 student societies.

A Yale graduate said that Yale taught him not only knowledge-related skills, but also life values, moral concepts, ways of thinking and so on, which influenced him throughout his life. These things are not taught to him by a person, but exist within Yale’s cultural atmosphere. “Our world shall be different because of your existence. Fighting for truth means the acceptance of spiritual culture, which enriches one’s life.” No one says this specifically to any Yale student. But the message is clearly expressed via the university’s atmosphere, penetrates the minds of the students and spreads via its alumni. The spirit of a university is inherent in its atmosphere, which cannot be nurtured in one day and is the most important quality of a century-old world-class university.

2. The mission of university education is to bring out the best in every student.

Oxford University is the cradle of British prime ministers. An Oxford professor told the author of a saying that goes, “What an Oxford tutor does is to get a little group of students together and ‘puff smoke’ at them. Men who have been systematically smoked at for four years turn into ripe scholars. (The smoke kindles the torch in the heart of students.)” Ecole Normale Supérieure Paris France is neither called a college nor a university but preserves its name as “school” (a name disfavoured in China). But no one can question its status as a world-class institution. “The task of a school is to give full play to the gifts of its students,” the president of the School once said in Beijing.

Harvard’s president remarked at its 350th anniversary: “What Harvard should be most proud of is not how many Nobel laureates or presidents it has produced, but rather that it makes every gold that enters Harvard shine.” The philosophy of world-famous universities such as Oxford and Cambridge is to exploit students’ potential and inspire their creativity.

As long as the torch in a student's heart is kindled, he or she will become a star whether he or she studies in a university or a vocational institution. There are

numerous examples of this.

3. University education should inspire a spirit of teamwork and creativity in students

In 2007, Harvard accepted 2,058 students out of 23,000 applicants from all over the world. One of them is Wu Shengwu, a Chinese American student who is less than 18 years old. He held not only a Harvard offer, but offers from Princeton, Yale and the University of California (Berkeley). What's more, he was also granted a scholarship which covered his education from undergraduate level all the way to doctoral learning no matter which university he chose.

Why was he so favoured? Besides his impressive academic record, he stood out in two areas: creativity and team spirit. He founded a science club at 15 and later initiated a students' science exhibition, which displayed the results of cooperation between high school students and primary school students. Wu was special as he thought not only of himself but also of other people. As of those who have both creativity and team spirit, there is every reason to believe that they will make achievements in any field they enter. Scientific research is a group undertaking, be it the two essays proving the existence of "top" quark (1995) or the two essays solving the mystery of the human genome sequence (2002), each of which were signed by several hundred people.

4. Basic elements of a first-rate university

(1) Different universities must have different qualities.

The quality of a university is a sufficient and necessary precondition for it to become a world-class university (i.e. world-class universities have their own distinctive features and only with special qualities can a university be a first-rate university).

(2) A university must have world-class professors.

A sufficient and necessary condition of becoming a first-rate university is world-class professors, the autonomy of professors and their dedication to their careers.

(3) A university must have first-class students.

A sufficient and necessary condition of becoming a first-rate university is first-rate students, their aspirations to explore the most advanced edge of humanistic and scientific research under the guidance of first-rate professors, or their dedication to social services with great interest and curiosity.

(4) A university must have **independent thinking** and **free expression**.

A sufficient and necessary condition of becoming a first-rate university is independent thinking and free expression.

(5) A university must have a **relaxed** academic environment **free from impetuosity**.

A sufficient and necessary condition of becoming a first-rate university is a relaxed academic environment, both internally and externally, free from impetuosity.

(6) A university must have sufficient funding support from **non-government** sources.

A sufficient and necessary condition of becoming a first-rate university is ample non-government funding sources.

Chapter IV. Suggestions on How to Run a University Well

According to Professor Luo Yuming of Fudan University in his book *Taoist Words—Essays on the Philosophy of Lao Tzu and Chuang Tzu* (Cheung Hwa Book Co., 1994), US President Ronald Reagan quoted *Lao Tzu* in his State of the Union address when talking about economic policy: “Govern a great nation as you would cook a small fish; do not overdo it.” (Turn over the fish frequently; it would be broken into pieces. It is the same with ruling a big nation. Do not overdo it, otherwise chaos will follow.) Reagan quoted this saying to illustrate the importance of the free market economy, which is an application of eastern wisdom in the western world. Luo’s book also says: “During the reign of Emperor Yao, an elder sang a song while playing a game of hitting earthen blocks:

*I rise up to work in the fields at sunrise and rest at sunset
I drink from the well I dug; I eat from the fields I tend
What have the actions of the emperor got to do with me?*

In peaceful times, the people did not feel like they were being ruled or subjected to the mercies of the emperor. This is the ideal state of governance and the greatest eulogy to the emperor!”

This is the way that a country, and likewise a university, should be run. This is the wisdom of Princeton leaders in “not questioning Professor Wiles for nine years” (Refer to page 195, *The Works of Educationists in Modern China---* Yang Fujia). Within a certain planning framework (legal ruling), “govern with non-interference” is perhaps the best form of “governance.”

Academician Ge Molin once asked the seniors of National Southwest Associated University (*Xi Nan Lian Da*) how the university could educate so many well-known people during a time of national chaos. They stressed that the main reason was that the order of teaching and research at the university remained stable. The basic law of education is that it cannot be carried out in times of turbulence. Looking back to ourselves, it is well worth considering why our education suffers from frequent changes.

Higher education in China should be “governed as we would cook a small fish.” With this aim, the following suggestions are put forward.

1. Maintain direction guided by some basic principles

Party General Secretary Hu Jintao points out: “Education should be supported by greater financial resources and stronger commitments. Economic and social development planning shall give priority to educational development. The fiscal budget shall first satisfy the needs of education and human resources development.” (9 September 2007) China’s HEIs are still short of funds, but the most urgent issue is how to best utilize every penny of the people’s hard-earned money!

Premier Wen Jiabao says: “Educational development demands both mental effort and financial resources. Neither of these elements is dispensable.” (9 September 2007) **“A university should be run on thrift and hard work. The success of a university lies not in extravagant buildings, authoritative rostrums, or other widely publicized things, but rather in its independent thinking and free expression. Through discussions and communication, teachers and students complement each other both in teaching and learning, which leads to the formation of an individualistic academic atmosphere. The atmosphere is constantly enriched and carried on, which exerts influence over more and more people. Thus a university in a real sense comes into being, which would be followed by talented people with vision and wisdom. Then, the nation is full of hope.”** (14 May 2008)

A must in implementing these words is to provide **guarantees in the system**. A desirable system is a system under which a university is run by educationists, enjoys autonomy of independent thinking within the constitutional and legal framework, and free expression. **“Institutions of higher learning should be geared to the needs of society, run independently and practice democratic management in accordance with the law.”** (Article 11, *Higher Education Law of the People’s Republic of China*).

2. Set up standards for categorizing universities and make better plans for the distribution of universities

In order to serve China's economic development, China's higher education should focus not only on increasing the number of university students but also on optimizing the structure of higher education. It is suggested that authorities concerned categorize universities and grant them equal treatment while giving extra support to key institutions in each category. Efforts should be made to encourage universities to strive to be the top within their groups. It is recommended that the Ministry of Education researches and formulates a scientific and rational structure for higher education. Standards for categorizing universities should also be set up so as to impose strict controls on upgrading universities to the higher league. Local governments should draw up rational distribution plans for the universities under their jurisdictions by modeling them on "the California Master Plan for Higher Education" so that higher institutions of all kinds can distinguish themselves within their groups.

Professional HEIs and HEIs that offer bachelor's or higher degrees can be compared as two types of musical instruments in a band. Therefore, efforts must be made to bring them into harmony with the development of higher education. For instance, college admission policies need to be adjusted. Professional HEIs should no longer be placed after universities that offer bachelor degrees or higher in recruiting their students in order to reverse the situation that only students with the lowest scores be admitted into vocational institutions. Adjustments should also be made in the human resource management system. The practice of employing PhD holders regardless of the position, and of paying PhD holders higher salaries must be abandoned.

In short, the government should adopt preferential policies to ensure that professionals are educated for "all walks of life." Measures adopted should be practical and publicized. Only in this way can more progress be made in economic development and social equity be achieved.

**3. Improve and implement on a trial basis the following management model:
"Under the leadership of the university Party committee, the president assumes overall responsibility while professors govern academic affairs in a democratic manner."**

This model can be practised in several universities on a trial basis in accordance with the provision stipulated in the *Law of Higher Education of the People's Republic of China*, that "The state-run institutions of higher learning practice the president responsibility system under the leadership of the grass-roots committees of the Chinese Communist Party in institutions of higher learning." (*Article 39, Higher Education Law*)

First, major decisions have to be made at the plenary meeting of the university Party committee, with full deliberations on the opinions and advice of the university council and academic committee. The Party committee convenes at least once a

month. At least one-third of the Party committee members are directly elected by schools and departments. These members comprise professors who are fully engaged in teaching and research as well as students elected from among student CPC members. The Party committee is in charge of making major decisions in line with the policies of the CPC and state laws and regulations. It is also responsible for recommending candidates for President, Finance Director and Academic Director, who are then elected by the university council and appointed by the Ministry of Education or provincial/municipal governments. Moreover, ideological education for the faculty and students, especially the latter, and party affairs also fall within its responsibility.

Secondly, the president is the chief executive who can appoint or dismiss the vice president to support him/her in executing resolutions adopted by the university Party committee, the council and the academic committee. The Party Secretary and the president are not supposed to hold concurrently the posts of chairman of the university council or academic committee.

Thirdly, the responsibilities and jurisdiction of the university council and the academic committee have to be made explicit and reaffirmed so that **their roles in administration and teaching can be brought into full play to ensure that educationists run the university**. “*Power ought to serve as a check to power so as to avoid abuse of it.*” [Quoting Charles de Secondat, Baron de Montesquieu (1689-1755), a renowned French thinker in the 18th century, in *The Spirit of the Laws*.]

Fourthly, as for “professors running the school” or “professors governing academic affairs,” focus must be placed on system guarantees. Professors, especially those working at the forefront as teachers and researchers, shall enjoy due respect and full rights to air opinions and make decisions. The president should be a well-versed educationist. The title of academician should not be listed as a prerequisite for presidency, as a scientist is not necessarily an educationist.

In short, a sound and desirable system should be able to constrain the powers of both administrative departments and university leaders. It will allow university leaders to set their eyes “down” (on the needs of students) instead of “up” (to officials of higher rank). Henry T. Yang, Chancellor of U. C. Santa Barbara and one of the most outstanding university presidents in the US, said, “As a president, I spend about 80% of my time talking with professors and students and listening to their opinions.” (Wang Danhong, *Science Times*, 19 Feb 2008) According to Mr. Yang, during his first year of presidency, he had 100 lunches with 900 professors. He also insisted on teaching undergraduates basic courses despite his tight schedule. In 1996, Harvard President Neil L. Rudenstine told the author that his first task was to scout for talented people worldwide.

4. Pilot programmes to diversify college recruitment scheme to avoid

“(students’) fate being decided by a single (college entrance) exam”

In his government work report submitted to the National People’s Congress on March 5th, Premier Wen Jiabao said, “(The government) shall implement competence-based education in an all-round way and push forward educational reform and innovation. It shall deepen reforms of the educational curriculum, the methods of teaching, the examination and recruitment systems, the system of evaluation etc., and effectively relieve the study workload of primary and high school students.” He hit the nail on the head in his speech on the demerits of China’s higher education nowadays.

Pilot programmes could first be launched in several provinces and municipalities based on the principle of separating examinations from admissions. If the current college entrance examination system is not reformed, a competence-based education and creativity-oriented education system to be implemented by the State starting from the primary school level would not be possible. The fund is being allocated step by step to the nine-year compulsory education programme, whose aim should be explicitly set as “to educate and train quality citizens for society.”

While meeting the students of Beijing Normal University, Premier Wen remarked, **“It is our common aspiration that our motherland realize modernization and be duly respected by the world. How can that be achieved? We should rely on a strong economy, advanced science and technology, full democracy, a sound legal system, high moral standards as well as high-quality people. *The key lies in the comprehensive quality of our people.*”** The reform of the college entrance examination system should be beneficial to the cultivation of good citizens and the improvement of the overall quality of our citizens.

Suggestions for practicable measures are proposed as follows:

The examinations are organized by specialized authorities and take place three to four times annually. (In the US, there are seven exams; students can take the exams at any time and apply for the universities they prefer with the most satisfactory scores). The model of exam subjects should be “2+X+Y”; “2” refers to maths and Chinese (including writing); “X” refers to foreign languages; Y refers to physics, chemistry, biology, history, etc. The subjects of “X” and “Y” are decided by the universities applied for. “2”, “X” and “Y” are not necessarily taken at the same time; the exams take place several times each year.

Each HEI decides independently on enrolment conditions such as students’ high school academic records, academic references, and interviews. Anyone who submits false application materials will be denied admission. Departments concerned will also be held legally accountable.

With the requirements in (1) and (2) fulfilled, students can apply for several universities at the same time. If granted offers by different universities, the students can choose to accept whichever offer they like.

The reform of the college entrance examination is gaining momentum with a number of provinces and municipalities actively involved. Its success lies in the integration of policy-making by the central authority and the mobilization of local government initiatives.

5. Key elements and objectives of the reform of higher education

China's higher education reform should revolve around the following five key phrases: talent recruitment, kindle the torch (of passion for academic achievement), cultural development, structural adjustment, and institutional reform.

The objectives of the reform can be summed up in eight lines:

Diversified college entrance scheme characterised by the separation of examination from admission;

Rational HEI structure with different universities having different qualities;

Special funds set up to help poor students;

Manage the school with thrift and hard work;

Professors govern academic affairs under the leadership of the university Party committee;

Academic freedom and university autonomy;

Favourable environment for innovation;

Student/teacher-centred environment to bring out the best in them.

Appendix 1

Picture 1

The library is a landmark building on the campus of a prestigious university, which is spread over 113 hectares.

Picture 2

Walking into the library, one finds a lot of umbrellas and assumes that they are for public use on rainy days. The truth is that the sunlight is so dazzling in the reading room that students have to shield themselves with the umbrellas while reading. The glass walls are pleasing to the eye but turn out to be unpractical for the library.

This sounds like a joke, but is actually happening in some Chinese universities. A Scottish professor, who paid a short visit to a university in Shanghai, was asked to work in a luxurious office building. The air conditioning system was not working at its full capacity as heating costs for the whole building would be astronomical. The professor said jokingly, “Fortunately, I have brought with me a Scottish blanket to put on my lap.”

Ms. Chen Weijia, Party Secretary of the Communication University of China sent a letter after viewing the above pictures. She wrote in the letter that during a university leadership seminar hosted by Xiamen University in the summer of 2006, a visit was paid to the University’s new campus. **Yale President Rick Levin, after visiting the bright and spacious library with a glass ceiling there, made an appeal for saving energy to the participants at the next day’s session.** In 2007, he made a speech on energy saving at the same seminar held at Xi’an Jiaotong University in 2007. It is said that he is still following closely his Chinese counterparts’ response to resource conservation and sustainable development. Although the wasting of resources is not a phenomenon common only to universities, **the universities should by no means turn a blind eye to this issue.** Wu Qidi, Vice Minister of Education, once initiated a resource conservation campaign in universities directly under the Ministry of Education. Universities are responsible for cultivating and educating talent. If the future generation lacks awareness of saving energy and resources, China’s sustainable economic growth and social progress will be compromised.

Appendix II: A Letter from a Friend

How much homework does a pupil in Grade One have to do?

Here, I would like to show you the homework my little girl brought back home on a Friday afternoon. (Perhaps the teacher assigns more homework because of the long weekend ahead.)

Mathematics: a weekend exam paper, page 1-10 of *After-class Math Exercises Book* (16k-size pages);

Chinese: copy out eight new words ten times each, recite an ancient poem, write from memory new phrases from four lessons (about 50 phrases);

English: a weekend exam paper, copy out 60 new words and write from memory 20 new words.

The above is only handwritten homework. Apart from this, she has to do some oral work, such as reading texts aloud and previewing new lessons. Do you think that's too much?

In fact, I think that pupils in Grade One or Two should not be asked to do so much handwritten homework for the following reasons:

I. Children in the first two years of primary school have a very short attention span and cannot sit quietly doing homework for a long time. Moreover, too much sitting is not good for the growth of the spine.

II. Children are not tall enough to keep their eyes within an appropriate distance from their books, requiring constant adjustment of their eyes to ease this discomfort, thus inducing myopia.

III. Their hand muscles are not strong enough to control pens. They tend to feel tired when forced to write. Moreover, in order to better control the movement of the pen, children tend to hold the pen at its nib. And if they sit straight, they cannot see the nib, and naturally, they will lower their heads down to the book, making their eyes even more susceptible to myopia.

In addition, children are not allowed to leave the classroom during the break (except to go to the washroom) for fear of accidents. They cannot relax their eyes by looking at faraway objects. This effect cannot simply be replaced by doing eye exercises. Thus, more and more teenagers are becoming short-sighted. (Indeed, this trend creates a large amount of business for opticians.)

I think my girl is fairly clever. She can recite every page of her English textbook, but she is reluctant to spell out words. She can repeat at once the stories, legends or

myths just told to her, but she is impatient when asked to copy or write from memory the new words. She is quite happy with math puzzles, but she simply yawns at the sight of exam papers. I think most children are like my girl. Why would our schools not take into consideration the mental and physical development of children, and progress slowly by first cultivating an interest? I am occasionally bothered by the possibility that too much homework and too many exams will dampen my girl's interest in study.

I forwarded the letter to Chen Weijia, Party Secretary of Communication University of China, and she replied:

I want to cite another example. When my daughter was in the first (or second) years of primary school, she was requested to complete a phrase “叶__” (meaning leaf) in a Chinese exam, she wrote “绿叶”(green leaf), and was marked wrong by her teacher. I was quite puzzled. My daughter told me that the teacher said that they hadn't yet studied the character “绿” (green), so she simply couldn't use it. What's more, there are too many strokes in the character “绿”, and she could easily write it wrongly and therefore miss more marks in the exam. It is safer to write “叶子” (another expression of “leaf”), thus, “叶子” is the only right answer.

Another Letter:

When I came back home, three kids were waiting for me -- my daughter, her friend from Australia and the child of a colleague of my husband. They had turned my house into a playground. My daughter was the happiest, since she seldom had the chance to play with other kids. By the way, the three kids were educated under three different kinds of systems.

The kid of my husband's colleague studies in a well-known public-funded primary school (which is also my alma mater). The students there are only allowed to **drink once, and to answer nature's call twice during a school day (which is incredible to hear). They are not allowed to leave the classroom during class. Every day, they have to write an article in Chinese besides other homework, which is often not finished until almost 23:00. Though parents are dissatisfied with this, they dare not complain, leaving their kids to the mercy of the teachers.

**My daughter is a student of a private primary school established only four years ago. She gets up at 6:15 (even earlier than me, because her school bus picks her up before 7:00), and gets back home at 17:45 (though the school is only fifteen-minutes drive from home, the bus has to make detours to pick up many other kids). The students are not allowed to play outside the classroom for the sake of their safety either. They are also assigned a lot of homework. But fortunately, their homework is mainly in oral form which is easier to complete. Moreover, parents will receive a

report on the activities of their kids, and they can even give suggestions to the school (but whether these suggestions are accepted is another issue).

**The friend of my daughter used to live downstairs. They moved to Australia last year. The kid studied at a local school there. She spends most of her time playing rather than doing homework. She is happy, as she can play throughout the day. She is even allowed to eat in class, not to mention use the toilets! Teachers and parents are equal, and they often discuss together how to educate the kids!

Appendix III: A Letter from a Graduate

My Days in the UK

By Chen Feiran, 27 February 2008

(Graduated from Shanghai Institute of Foreign Trade in July 2006, and went to the UK for a master's degree)

One-and-a-half years in the UK is a long, yet short, hard, yet happy period.

I still remember the day I left for the UK. That was August 13, 2006. With three big suitcases and a backpack, I stepped onto the plane for the UK. Sitting on board, looking at the surroundings familiar to me outside the window, I had mixed feelings. This was my first time leaving a place where I had been living for 20 years for a new place. Thinking about the coming challenges, I was nervous yet excited. When I was in Shanghai, I had a very comfortable life, but I knew that **only by facing difficulties myself could I grow up**. Only a year after, my decision had proven to be worthwhile. I could never forget what my father said to me, "In Shanghai, I will help you with everything, but in the UK, I cannot protect you even if I stretch out my arms. Take care of yourself!" Though I burst into tears upon hearing these words, I understood that I could only rely on myself to be more mature and independent.

During the first month at the **University of Nottingham** when I attended a five-week intensive language training course, I led a very simple and happy life. That was a splendid summer when the campus was as beautiful as a garden. Near the grass areas and lakes, ducks, swans and squirrels were everywhere to be found. The library situated in the centre of the lake housed an enormous amount of books. It was open all day long throughout the whole week, and this was also the only place equipped with air-conditioning on campus. Even at midnight it was crowded, filled with students eager to learn. Walking on the campus with books in my hands, I could not help feeling that life could be so simple. I made many friends in the language course. Because all of us were newcomers and came from different countries, we often helped each other. Whenever I was in trouble, they tried their best to help me out. Thus, since the very first day I arrived in the UK, I had always felt the warmth there.

As a newcomer to the UK, I found the language to be indeed a big problem. All the details of my daily life are expressed in another language. I just could not catch all the information in a speech, nor could I communicate effectively with others. However, the intensive training course helped me a lot. **The class size was small with only ten students and the teachers were very kind**. The training made it much easier for me to take the formal courses.

Learning in the UK was totally different from that in China. Teamwork and cooperation were constantly emphasized. Many assignments had to be finished by

groups rather than individuals. Anyone who lacked the ability to communicate effectively or **team spirit** would slow down the whole group, no matter how competent he/she was. A team was made up of people from different places with different cultural backgrounds, which would more or less hinder effective communication. Thus, if one wanted to cooperate well with others and accomplish the task, he/she had to try to respect their differences and to cooperate with other students.

Loneliness was inevitable when one was living abroad, for one had to walk on foreign roads, watch foreign scenes and listen to foreign songs. Though one might make lots of friends at the university, life was still different from that in the homeland. Apart from taking care of oneself, one also had to face loneliness alone. When walking alone on a path, one would feel the pain of living in loneliness. You have to conquer the vulnerability, solitude and uncertainty in life. However, loneliness was also a way of life, giving us enough room and time to contemplate the gains, losses and aims of our life.

The one-year MA programme was difficult. Though I had heard about it long before, I felt it was much harder than expected. It was a huge test of body and will. But it also taught me that there should be **no limit to one's potential**. From the start of the first term, I was buried by piles of essays. I had to hand out papers of 3,000-plus-words every week, and before that, I also had to read a lot of materials for preparation. Therefore, I was so deprived of sleep that I used to regard sleep an unattainable luxury. Two or three hours of sleep a day was the normal practice. I still remember when I was writing an article on Corporate Financial Strategy, I was almost driven mad. The teacher assigned us to interpret two papers in the latest journal with the ideas of Nobel Prize winners of Economics we had just learnt. Both of the two papers were 30-odd pages long and filled with models and formulas. After working through two nights, I still couldn't comprehend them. At that time, all my classmates were tortured by the assignment. Even late at night, I could hear their desperate moans. I was only too tired to cry out. I would never forget that cloudy afternoon. On my way to the library, heavy rain fell suddenly. I made my way against the heavy rain and strong wind. The rain drops hit my face, and I could truly feel the pain. I held my breath, moving forward. It stimulated my determination to overcome the difficulties! I murmured, "Let it come with more violence!" I printed out dozens of journals, and made up my mind that I would read and understand every word of them. For one whole week, I worked very hard on my essay, and printed materials were everywhere in my room. Finally, on the day when the essay was due, I saw my classmates I hadn't seen for a long time. They were all exhausted. The boys had even forgotten to shave their faces. We said "good luck" to each other and put our hard-won papers into the mailbox. I will never forget the passion that burnt in my heart on that rainy day, and it was the passion and determination that had helped me to conquer the obstacles one by one.

One of the biggest gains of my life in the UK is that I made many foreign friends.

There were few local people studying for master's degrees over there. My classmates were from different countries, and we helped each other just like family members. We always encouraged each other whenever we were burdened with lots of assignments. A few words, a hug or a smile would become the driving force when I was tired. We always said that our friendships had been re-doubled, and we were sisters and brothers. These friends have already become my precious treasure.

People living abroad would easily become nostalgic. Only after arriving in the UK did I find that I love my homeland so much, the wet air in Shanghai, the warm sunshine along the Huangpu River and the feeling when I shuttled through the crowd. Whenever I met foreigners who held prejudices against other races or nations, I couldn't help but get furious, which was quite a surprise to myself! And I knew that was because of my love for my country. Thus, I would work even harder, for I represent not only myself.

In retrospect, I have really gained a lot. I have become more mature and independent, and my will and determination have sharpened. I have already graduated, and I know that my dreams will never fade in my heart and thus I will never give up chasing them.

Notes by Yang Fujia

I often receive letters from my students, and the above letter is one of them. The student is now working in the UK, and is coming back to serve her motherland soon.

This letter reminds me of some words of Xie Xide, an academician and ex-president of Fudan University, **“Why do our graduate students enjoy more leisure time than our primary school kids?”**

It also reminds me of some remarks made by Wen Jiabao. On November 20, 2006, I reported to Premier Wen, and mentioned that there were only fifteen students in one class in the first year of studies at Ningbo Nottingham University. Mr. Wen said, **“HEIs should have a small class size.” “Tutors should often meet students to provide proper guidance. But some students seldom have the chance to talk with their tutors even after years of study.”** (Cited from *People's Daily*, Page 2, 28 November 2006) The situation hasn't yet changed. “Now, the supervisors simply have no time to guide their students, and they meet students only once or twice a year.” (Cited from *China Youth*, 22 April 2008)

Premier Wen talked about the words of Dr. Tsung-Dao Lee. Dr. Lee told the story of how Fermi (a Nobel laureate), his doctoral tutor, gave personal guidance to him. He then added: **“To cultivate talent with the spirit of innovation, close partnership**

between students and tutors is necessary, which cannot be replaced by internet or computer programmes. Being human beings, they need the student-teacher relationship, and after an education of one or two years or even longer, the students could think independently for the rest of their life.” (Tsung-Dao Lee, *Challenges From Physics*, 2002)

Sutherland, a graduate student of Yang Zhenning, also told his story, “I was his first graduate student at the State University of New York, Stone Brook (where Yang was Director of the Institute for Theoretical Physics). I started to work on my paper in 1966, and was guided by him during the next three years. He seemed to have more than enough time to spend on me. On many occasions, I came to the school in the early hours to see whether he had time to talk with me. I was invited to his office which was an attracting and interesting place to work in. We began to talk, and were both fully engaged in the discussion. Sometimes he was interrupted by calls and his guests, and I read materials when he was absent. As soon as he was back, we continued with our talk, discussed and compared results till late afternoon. I was exhausted. I worked in such a manner everyday, and had never worked like this before, and had never felt happier. The atmosphere in the office was warm and homely, and filled with wisdom and excitement. This kind of atmosphere was conducive to scientific achievements. Till today, this atmosphere is still the source of scientific achievements.” (Yang Zhenning, *Dawn Light Collection*, 2008)

In this article, I wrote about six principles regarding how to become a first-rate university, and one of them is: “A sufficient and necessary condition of becoming a first-rate university is **first-rate students**, their aspirations to explore the most advanced edge of humanistic and scientific research under the guidance of first-rate professors; or their **dedication** to social services with great interest and curiosity.”

Until the atmosphere mentioned above can be found in some universities in China, and graduate students can experience or enjoy such a busy life, these universities will not be first-rate.

The following is another letter from a graduate student of Ningbo Nottingham University (Since the University was established in 2004, two batches of students have attained their master’s degree. We have received many letters from our graduate students, and this is one of them.)

Shen Linlin (MA in International Communication, 2007)

She is now working with the Australian Embassy in China.

My days at Ningbo Nottingham University were the most productive days in my life. The British style of education gave me a chance to get out of the confines of the traditional Chinese style of teaching. This was my first time embracing a western style of education. We were required to study proactively. During the process of

investigating a problem, we learned not only knowledge, but also the methods of exploring and the logic of thinking. **In the process, the teachers helped to set your research on the right track rather than simply offering you the “right” answers.** As many topics for discussion did not have definite answers, you only needed to persuade others with adequate evidence. Thus, the libraries and the internet had become our resources for exploring different questions.

Its in-class discussions and small class size are superior to other universities in China. During heated debates, we could listen to others’ opinions and compensate for our own deficiencies. The small class provided everyone with the chance to speak about their ideas, which only forced students to rack their brains and pay enough attention to the discussion. I still remember that one classmate used to say that he had never been so tired in a class at any Chinese university. What touched me more is the sense of responsibility professed by the teachers. They were dutiful in every detail. Whether in class discipline or in class teaching, in assigning or marking homework, the teachers exhibited their sense of responsibility for every student.

I feel lucky to have chosen this university to continue with my studies. Upon graduation, I was recruited by the Australian Embassy amid severe competition. Due to the solid language basis I have formed during my studies in the university and the spirit of teamwork, **I adapted quickly to the working environment** here during the pre-occupational training. I want to sincerely thank my Alma Mater for providing me with such an excellent education and rich teaching materials, and even more for the care and efforts of the teachers. I will work hard as a way of paying back my Alma Mater. (For more information, please refer to *Ningbo Daily*, A16, 26 March 2008.)

This letter reminds me of an incident last November. Haifan Lin, the director of the Stem Cell Research Programme at Yale University, came to the University of Ningbo Nottingham to give a lecture on “the latest developments in stem cell research.” Among the 500-strong audience, none majored in science, yet they kept raising questions. Mr. Lin was surprised, for this was the first time that he encountered such a situation. Last week, a British economist also came to give a lecture. After the 40-minute lecture, students kept on asking questions for another 40 minutes. The host had to stop the lecture for the sake of time. In both lectures, there was a student pointing out a mistake. In the first lecture, Taiwan was listed as an independent state alongside other nations within a table, and in the second lecture, Hong Kong was listed as a nation. Both lecturers admitted their mistakes with a smile.

The motto of Fudan University is: “Learn extensively and be steadfast in your purpose, inquire earnestly and reflect on what is at hand” (A saying taken from *Analects of Confucius*) Professor Tsung-Dao Lee especially admires the two words, “learn” and “inquire.” Studying is to learn and ask. If there is no question, nothing new will be created.

In the first paragraph of this article, I cited some observations of Lawrence H. Summers, the former president of Harvard University, “A freshman can tell the president, ‘you are wrong’.” This is the culture of Harvard: minds supersede authority. If a university can boast such a culture, it may become a first-rate university.

Why do students studying at Ningbo Nottingham University have such feelings?

Apart from the professionalism of the teachers, content and teaching also play an important role.

(Let’s review the strategies put forward by Premier Wen in his *Report on the Work of Government* on March 5, 2008: “(The government) shall implement competence-based education in an all-round way and push forward educational reform and innovation. It shall deepen reforms of the educational curriculum, the methods of teaching, the examination and recruitment systems, the system of evaluation etc., and effectively relieve the study workload of primary and high school students.”

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In addition, I owe my deep gratitude to Professor Li Huazhong and Professor Wang Fan, for organizing a workshop at Zhongshan University in June this year attended by many counterparts in the field of physics from all over China. A wealth of valuable thoughts concerning higher education in China was solicited from the workshop, many of which were incorporated by the author into this article. Apart from the author, those attending the workshop included:

| | |
|---------------------------|---|
| Professor Li Huazhong | Former Vice-president, Zhongshan University |
| Professor Wang Fan | Department of Astrology, Nanjing University |
| Professor Zhu Shiqing | President of the University of Science and Technology of China |
| Professor Chen Jia'er | Former President, Beijing University; |
| | Standing Committee Member of the Chinese People's Political Consultative Conference (CPPCC) |
| Professor Gan Zizhao | Former Dean of the Department of Physics, Beijing University; CPPCC Standing Committee Member |
| Professor Ge Molin | Chen Xingshen Mathematical Science Institute, Nankai University |
| Professor Lu Tan | Purple Mountain Observatory of Chinese Academy of Sciences |
| Professor Yang Gangkai | Vice-president, The Chinese University of Hong Kong |
| Professor Chen Fangzheng | Institute of Cultural Studies, The Chinese University of Hong Kong |
| Professor Guo Hanying | Institute of Theoretical Physics of the Chinese Academy of Sciences |
| Professor Qian Zhirong | John Hopkins University; |
| | Former vice-president of Hong Kong University of Science |
| Professor Cai Decheng | Former Editor-in-Chief of Beijing Science and Technology Herald |
| Professor Hou Depeng | Former President of Guangxi University Vice Chairman of CPPCC Guangxi Committee |
| Professor Wang Shaojie | Former Vice-governor of Hubei Province Vice Chairman of CPPCC Hubei Committee |
| Professor Su Ruqian | Department of Physics of Fudan University |
| Professor Liu Lianshou | Institute of Particle Physics of Huazhong Normal University |
| Professor Yan Mulin | The University of Science and Technology of China |
| Professor Zhao Kaihua | Department of Physics of Beijing University |
| Professor Zhang Chunxiang | Former Vice-president of Zhongshan University |

A “Funny Story”

Since many professors in the above list are senior experts in the field of education, in accordance with Chinese tradition, when they turned up at Zhongshan University for the workshop, the President of the University was supposed to receive them in person to show due respect to such a constellation of prestigious experts. Yet only a young vice-president of Zhongshan University joined our lunch break. However, we took it quite well, because we understand that most presidents of universities are busily engaged in school affairs, left with little personal time.

However, the situation was completely different in another well-known university not far away from Zhongshan University. The arrival of the secretary of an Assessment Team sent by the Ministry of Education was greeted with such fanfare. The vice-president of the University took the trouble to pick up the secretary at the airport. Photos were taken with the President and all Vice-presidents, with the secretary standing the middle holding a bouquet of flowers in her arms. Those photos

caused a big stir when the school published them on the internet. The event was made a laughing-stock by citizens and provoked debate.

Although it is an internationally common practice to conduct quality assessment of universities, as far as I'm concerned, in universities such as Nottingham University, with which I work, there is no chance for school leaders to personally meet the Assessment Team. Yet in China, it is highly understandable for six presidents and vice-presidents to welcome just a secretary of the Assessment Team. The damaging implication it caused overseas was tremendous.

Thus it is high time to reform the assessment system of HEIs. [Let's review the strategies put forward by Premier Wen on his *Report on the Work of Government* on March 5, 2008: **“(The government) shall implement competence-based education in an all-round way and push forward educational reform and innovation. It shall deepen reforms of the educational curriculum, the methods of teaching, the examination and recruitment systems, the system of evaluation etc., and effectively relieve the study workload of primary and high school students.”**]

Author's Brief Biography (With focus on parts relating to education)

1958

Graduated from the Department of Physics of Fudan University and stayed on as a teaching assistant at the University

1960

Deputy Dean of the newly-founded Department of Nuclear Power of Fudan University

1963

Lecturer of the Department of Physics of Fudan University

One of the first scholars in New China to be sent abroad for a further study at Copenhagen University (returned to Fudan University in 1965)

1978

Associate professor

1980

Professor

1987-2001

Director of Shanghai Institute of Nuclear Studies of Chinese Academy of Sciences (name changed to *The Institute of Applied Physics*)

Submitted a proposal to build Shanghai Synchrotron Radiation Facility (China's

largest technical device, expected to be completed in 2008), to the two presidents of the Chinese Academy of Sciences and seven leaders of Shanghai Municipal Government in 1995

1991

Academician of the Chinese Academy of Sciences

Joined the leadership team of Fudan University with strong recommendation by Xie Xide, the late Former President of Fudan University

Appointed as Vice-president of Fudan University by the Ministry of Education on May 25th

12 February 1993

Appointed as President of Fudan University by the State Council;

Took the position of Dean of the Institute of Research and Development set up in the same month, the first think-tank in China's higher education system

25 February 1993

Announced target to build Fudan University into a world-class university at the inauguration ceremony as President of Fudan University

March 1993

Proposed to Zhu Kaixuan, Minister of Education that Fudan University should be co-managed by the Ministry of Education and Shanghai Municipality, a trail-blazing practice in China's higher education

June 1993

Put forward the following propositions:

- 1) "Whoever cheats in study gets expelled from the school" (he also published a frontpage article in *Guangming Daily*, in which he expounded on the view that the primary task of professors is to teach students how to be decent and upright citizens)
- 2) First-rate professors should be involved in instructing undergraduates in their basic courses
- 3) Creating opportunities for young people.

1994

Advocated "Broad Education" in Fudan University

Invited to a breakfast meeting with the US president for eight consecutive years from 1994. In 1997, was the only Chinese among 25 foreign representatives received by President Bill Clinton

Since 1996

Led Fudan University into some major international organizations in the field of education and entered leadership circle of these organizations

1997

Initiated the establishment of the Association of University Presidents in China and served as the Founding President

1998

First visit to UK as Head of the Chinese University Presidents' Delegation

August 1998

Submitted letter of resignation from the position of President of Fudan University to Chen Zhili, Minister of Education, which was approved in December 1998. Resigned officially in January, 1999

1999

Awarded Honorary Degrees (Doctor of Science) by Hong Kong University and Nottingham University of the UK

1999-2005

Special Advisor to the President of Hong Kong University

December 2000

Appointed as the 6th Chancellor of Nottingham University by the Board of Directors for a three-year term; elected for another term in December 2003; in December 2005, the University Board decided to install Yang on a third term starting from January 2007

Since 2001

Member of the Board of Directors of the *Nuclear Threat Initiative* (an international organization founded in the US); the 18 members include three US senators, a former US Defense Minister, a former Commander of the Strategic Forces of the US, the founder of CNN, the Speaker of NATO Parliamentary Assembly (French), the Deputy Speaker of the State Duma of Russia, the Chief Judge of the International Court of Justice in Hague (Japanese), the Prince of Jordan, a Noble Prize Laureate (Indian), a member of the UN Commission on Population and Development (Palestinian)

From 2001 on

Vice Chairman of the China Association for Science and Technology

Since 2004

Involved in the establishment of Ningbo Nottingham University and served as President of the University when it was officially founded in the subsequent year

Currently, the University hosts 2,800 students, including 300 graduates and 160 international students from over 30 countries and regions. In early 2006, State Councilor Chen Zhili, Party Secretary Xi Jinping of Zhejiang Province and Mr.

Prescott, UK Deputy Prime Minister, visited Ningbo Nottingham University and delivered keynote speeches.