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THE FACULTY PROMOTION AND MERIT SYSTEM IN CHINA AND THE UNITED STATES: THE CASES OF WUHAN UNIVERSITY AND THE UNIVERSITY OF CALIFORNIA, DAVIS October 2012

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ABSTRACT

Any serious inquiry about improving the quality of a university must begin with an examination of its faculty promotion and merit procedures, since a university's quality cannot be higher than that of its faculty. In this essay, we will examine the tenure track or regular faculty promotion and merit systems at the University of California, Davis, and Wuhan University, with a view towards understanding how they motivate the professoriate and foster creativity. In our analysis, we will pay special attention to compensation, as well as to work-life balance, issues. Our hope is to extract some lessons for these and other institutions of higher learning in the Unites States and China and, perhaps, even in other countries. As more and more universities around the globe aspire to become world-class universities, the issue of faculty rewards is becoming paramount, for there can be no world-class universities without world-class faculties.

INTRODUCTION

In recent times, many developing countries have shown great interest in improving their higher educations systems, investing in their best institutions in order to transform them into "world class universities" (Douglass, King & Feller; Salmi; Altbach; Wildavsky; Clotfelter; Gutek). China has been particularly proactive in this respect (Ryan; W. Morgan & Wu). A giant economy, growing at a fast pace, China is eager to build up with similar speed what Wanhua Ma calls its flagship universities (p. 32), that is, the best institutions of higher learning, which are basically those participating in the 211 and 985 projects. The 211 Project, established in 1994, seeks greatly to enhance the quality of one hundred leading universities in the 21st Century (thus, the name 211). The 985 Project, created in May of 1998 (thus, the designation 985), provides additional funds to the top thirty-nine institutions, most particularly, to the top nine of these (Li, pp. 17-18). There is great competition for funds and status, which is why Chinese universities are very interested in quality assessment. It is not a coincidence that the first worldwide ranking of universities was carried out in China, where the relative status of higher education institutions has taken on great importance. The government and the public there share the ambition for a significant number of Chinese universities to become world-class institutions in the near future.

According to Nian Cai Liu, in 2003, the Institute of Higher Education at Shanghai Jiao Tong University conducted its Academic Ranking of World Universities (ARWU)—the first evaluation ever undertaken of all universities around the globe—to determine where Chinese universities stood relative to others and to establish some benchmarks (p. 64). No Chinese university ranked among the top 100. The study concluded that there were a variety of reasons for this, including a lack of funding and a lack of autonomy. The Chinese higher education system, which is the largest in the world, is growing and needs models. After the creation of the People's Republic of China in 1949, it followed that of the Soviet Union, in which scholarship was separated from teaching, the former being conducted in research institutes of various kinds, and teaching was offered by specialized schools

¹ We would like to thank Barbara Horwitz, Ellen Switkes, and Yunhua Xiang, who read the first draft of this article and offered insightful comments. We also are grateful to John Douglass and Judson King for their advice and encouragement.

instead of comprehensive universities. Now China has adopted the American paradigm, in which scholarship is integrated with teaching and teaching is done at large universities that offer many different specialties.

There are important parallels between China and the United States that make this imitation natural. Both countries developed their universities quickly during periods of rapid economic growth, and both did so by copying systems used in other nations. In the United States, the examples were Germany and England. Just as the US transcended its German and English models and created its own unique system of higher education, China will probably invent its own distinctive structure in due time. At the moment, it is still in the imitation phase. Thus, there is great interest in learning how universities in other countries handle their affairs.

The United States is in a different stage as a nation and as an academic community. It has been a prosperous and important country for over a century, and its universities are at the peak of their success and stature. Indeed, more than half of the world's top one hundred universities are in the United States, which attracts large numbers of foreign students and professors, including many from China. At the same time, the globalization of the economy has made American universities more interested in what is happening in countries like China, which in some ways might represent a preview of things to come. Thus, a comparison between some key aspects of the higher education systems in China and the United States should be of interest to people in both countries, most particularly to academic leaders engaged in improving their universities. One area of great importance concerns the comparative methods for promoting faculty members and evaluating them for merit raises. This is key to the achievement of academic excellence, since a university's quality cannot be higher than that of its faculty. Any serious inquiry about improving the quality of a university system must begin with an examination of its faculty promotion and merit procedures.

We have chosen to compare two universities, Wuhan University and the University of California, Davis, not only because they happen to be the institutions of higher learning where we teach, but also because they share a number of traits. For example, each occupies a similar space within the higher education system of its own country. Although UC Davis's overall position in the 2010 Academic Ranking of World Universities is much higher than that of Wuhan (UC Davis is listed among the top 50 institutions worldwide, while Wuhan is included in the top 500), each is at the top of the second tier of universities in its respective country. Davis is not as distinguished as Berkeley, Michigan, Harvard, or Stanford. Similarly, Wuhan is not as well regarded as Peking, Tsinghua, Fudan or Shanghai Jiao Tong. But neither institution lags very far behind its nation's most elite group of universities, and both have realistic expectations of joining that group in the near future.

UC Davis was established in 1905 as the agricultural extension of the University of California, Berkeley—its "farm"—and has since become independent and grown into a large and successful campus. The second-oldest and third-largest campus of the ten-campus University of California system, Davis enrolls over 32,000 students, including more than 6,000 graduate students, and offers 102 undergraduate majors, 73 masters programs, 68 doctoral programs, and 4 professional degrees. In addition to its outstanding schools of agriculture and veterinary medicine, Davis has a wide variety of fine professional schools, including medicine, nursing, engineering, law, management and education. Its arts and sciences programs also are strong, with topranked programs in fields as diverse as ecology, entomology, plant biology, agricultural and resource economics, anthropology, and Spanish. Davis is a member of the prestigious Association of American Universities (AAU), which includes 61 of the top institutions of higher learning in the United States and Canada.

Wuhan University, one of the oldest institutions of higher learning in China, was founded in 1893 as the Ziqiang Institute and changed its name several times, also merging with other institutions, until it reached its present configuration. Wuhan, which is part of both the 985 and 211 projects, has approximately 45,000 students, including some 12,000 graduate students, and offers 114 undergraduate majors, 217 master programs, and 143 doctoral programs. Wuhan has a wide variety of professional schools including medicine, pharmacy, public health, engineering, journalism, public administration, law, and education. Its well-known arts and sciences programs are particularly strong in fields such as microbiology, geophysics, surveying and mapping, journalism and communication, economics, and philosophy.

Both UC Davis and Wuhan have large faculties. These include a variety of ranks, from temporary instructors to tenure-track or regular faculty. The academic prestige each institution enjoys is directly related to the quality and productivity of its tenure-track or regular faculty. In this essay, we will examine the tenure track or regular faculty promotion and merit system at each institution, with a view towards understanding how it motivates the professoriate and fosters creativity. Our hope is to extract some lessons for these and other institutions of higher learning in the Unites States and China and, perhaps, even in other countries. As more and more universities around the globe aspire to become world-class universities, the issue of faculty rewards is becoming paramount, for there can be no world-class universities without world-class faculties.

UC DAVIS

Faculty Ranks and Salaries

UC Davis did not have to create a model of faculty rewards, because, as a campus of the University of California system, it follows the system's well-established promotion and merit procedures, which are among the oldest and best-developed in the country. These practices came into being after the "Berkeley revolution of 1919-1920" (Fitzgibbon, pp. 23-32; Taylor, pp. 1-8), when the faculty senate demanded, and received, a great deal of authority from the regents, transforming it into one of the most powerful such organizations in the country. The faculty senate is as old as the institution, since it was created by the Organic Act of 1868 establishing the University of California, but it did not acquire much power until after World War I when, among other prerogatives, it began to oversee the faculty evaluation system, a responsibility that it now shares with the administration. Although the administration has final authority in faculty evaluations, the senate has a strong consultative function, and the administration does not disagree with its recommendations very often (Fitzgibbon, pp. 64-65; Taylor, pp. 89-90). The Senate, thus, has a central role in upholding a high standard of academic excellence among the professoriate. As new campuses were created, the Berkeley promotion and merit system was extended to them.

This system includes periodic merit evaluations for all ladder faculty, a procedure that dates from 1920 and includes a series of steps, each with a different salary level (Switkes, p. 39; Manaster, p. 23). The system is administered by a very important senate committee, which at Berkeley is called the budget committee, but on most other campuses of the University of California, including Davis, has taken the name of Committee on Academic Personnel, or CAP. Although there was a tacit understanding that all associate and full professor positions carried tenure, this was not made explicit by the regents until 1958 (Taylor, pp. 36-37). At that point, the regents established that dismissal should be only for good cause, after a hearing before the relevant committee of the faculty senate (Fitzgibbon, pp. 72-73). Thus, the UC system had periodic merit evaluations of faculty performance before it had well-established tenure procedures. At present, both sets of procedures—merit and promotion—are seamlessly integrated.²

The professorial series includes three ranks: assistant professor, associate professor, and professor. Each rank contains a number of steps. At present, these steps are: Assistant Professor I-VI, Associate Professor I-V, and Professor I-IX.3 Normally, assistant professors and associate professors are reviewed every two years, and professors are reviewed every three years. In addition to their merit reviews, faculty members undergo promotion evaluations, which require a great deal of documentation, including extramural evaluations of research activity. These more demanding processes are undertaken at four key transitions:

1) from assistant professor to associate professor, which results in the granting of tenure, 2) from associate professor to professor, 3) from professor V to professor VI, which is considered a major promotion, and 4) from professor IX to above-scale professor, an honor that only a small percentage of faculty members attain. Each step carries a salary listed on the salary scale, except for those professors who are above scale, whose salaries vary.

As of October 1, 2011, the arts and sciences salary scale progresses from an annual salary of \$54,800 for an Assistant Professor I, to an annual salary of \$146,300 for a professor IX. Currently, however, many faculty members are paid off-scale salaries, that is, salaries higher than the official salary for their rank and step. This is due to market demands: recruiting and retaining professors in certain fields has become very competitive. Thus, the number of faculty members with off-scale salaries has increased exponentially in recent times, so much so that at present the salary scale only represents the minimum salary for each step. In spite of the proliferation of off-scale salaries, the step system itself has not been changed, and transitions from step to step continue to be decided according to merit. So the step system works well. It is just that, in many cases, compensation and step have been decoupled: compensation reflects market value, while step reflects academic merit. For example, the official salary for a professor III is \$92,600, and for a professor IV, it is 99,300, or \$6,700 more. Therefore, a faculty member who is a professor III and has a \$10,000 off-scale adjustment will earn \$102,600. If that professor is advanced to professor IV, that faculty member's salary will rise by \$6,700, to \$109,300.

Off-scale adjustments are usually relatively small and can be lost if the recipients fail to make timely progress through the step system although, as a practical matter, this almost never happens. On the contrary, faculty members more commonly overperform and outrun the step system. Indeed, faculty members who have been especially productive can request accelerations, that is, early reviews. For example, a Professor III might request to be reviewed for advancement to Professor IV after two years in step, instead of three. This is called a one-year acceleration. If the professor requested to be reviewed after only one year in

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² The system-wide merit and promotion policies, which apply to all campuses of the University of California, can be found in three documents: APM 100 (http://www.ucop.edu/acadpersonnel/apm/apm-100.pdf), APM 200 (http://www.ucop.edu/acadpersonnel/apm/apm-200.pdf), and APM 220 (http://www.ucop.edu/acadpersonnel/apm/apm-220.pdf). Additional policies pertaining only to the Davis campus are described in UCD 220 http://manuals.ucdavis.edu/apm/apm-toc.htm#II.

³ Faculty—Ladder Ranks—Professor Series: http://www.ucop.edu/acadpersonnel/1112/table1.pdf

step, instead of three, that would be termed a two-year acceleration. One-year accelerations are relatively common, two-year accelerations less so. While most accelerations are typically one or two years, multiple-year accelerations are possible, provided that there is an extraordinary record of research. The idea is that if a faculty member has achieved the level of research distinction necessary for a higher step, he or she should be promoted to that step without delay. So, this truly is a merit system, not a seniority structure. Between one-quarter and one-half of all merit and promotion evaluations involve requests for accelerations.

In addition to accelerations, faculty members can request career equity reviews to correct unfair classifications due to inequities at the point of hire—being placed at a step lower than they should have been—or, less frequently, as a result of injustices during previous promotions and advancements. These reviews consider the candidate's entire career in order to determine whether he/she is placed at the right step. The campus conducts fewer than ten such reviews per year. Given the importance of situating incoming faculty at the right step, the Committee on Academic Personnel, through its college subcommittees, is involved in the hiring processes of all faculty members, whose appointments it has to approve.

The salary scale for most faculty members is based on an academic year appointment, which means that faculty members are free to work elsewhere during the summer, and some do. Scientists, in particular, are allowed to charge summer salary to their research grants, thus often augmenting their annual income by as much as 33%. Humanists occasionally teach in the summer, either on campus or at other institutions, sometimes abroad. Teaching, however, tends to be less lucrative than research, so scientists overall enjoy a higher level of income than do humanists.

Some professional schools, such as medicine, law or business—fields in which it is possible to make a great deal more money in non-academic positions than in academic ones—have a different and more generous salary scale designed to recruit and retain competent professionals to the academy. The rules regarding merit and compensation are the same as for the arts and sciences, and faculty members in the professional schools, in addition to the higher salary scales they enjoy, have access to accelerations and, in some cases, to off-scale adjustments. Thus, very successful scholars in these fields can command considerable compensation.

While most faculty members at the University of California are quite productive, and thus are advanced regularly, there are occasionally some individuals who fail to meet expectations. If the underperforming faculty member is an assistant professor, he or she will be informed of the problems and given suggestions for improvement during the pre-tenure appraisal, which is a very important procedure. Some faculty members so informed choose to leave the university before coming up for tenure, while others try to improve their performance and often succeed in doing so. All tenured faculty members must be reviewed at least once every five years to ensure that they show an acceptable level of productivity. They are subject to dismissal if they do not, although this rarely happens. Faced with a negative five-year review, professors tend to leave the tenure-track and become lecturers with security of employment or to retire. Most tenured faculty members continue to be promoted on a regular basis through the step system, thus never requiring a five-year review.

In general, faculty members at the University of California are very active and perform at very high levels. The problem is not that they are not productive enough; they are so productive that the system must expand to reward them. For example, the professor scale increased from eight to nine steps recently in order to recognize high achievers. If the level of productivity continues to rise, more steps may have to be added to the scale in the future.

The Faculty Promotion and Merit Process

All decisions concerning promotions and merit are made through a rigorous process of peer review, involving evaluations of research, teaching, and service. The candidate must prepare a file, including a statement about his/her accomplishments during the review period and plans for the future, copies of all publications and teaching evaluations and evidence of service. For promotion cases, that is, for the four key transitions (assistant professor to associate professor, associate professor to professor, professor VI, and professor IX to above-scale professor), the department solicits letters evaluating the candidate's research activities from distinguished scholars at other universities around the country and outside of it. Typically, half of the evaluators are from a list provided by the candidate. In addition, the candidate is allowed to supply a list of individuals whom he/she does not think can provide objective evaluations of his/her performance. The identity of the external evaluators is not disclosed to the candidate.

Once the promotion file is complete, it is reviewed and voted upon by the department's faculty and then submitted to the dean of the college, who adds his/her recommendation to the dossier. This entire file is then evaluated by the campus-wide Committee on Academic Personnel and by the central administration, which has the final word. For merit cases (step advancement within rank), external evaluations are not necessary, and the procedures are somewhat abbreviated.

The final decision in all cases rests with the administration. Except in a small percentage of cases, the recommendation from the Committee on Academic Personnel does not significantly differ from that of the department's faculty. The same is true of the central administration with respect to the recommendation of the Committee on Academic Personnel. Differing recommendations, when they occur, can be advantageous, as well as disadvantageous, to the candidates.

Faculty members who are not happy with the decisions of either the faculty committees or the administration can appeal to the Committee on Academic Personnel's appellate subcommittee, which can make different recommendations. The administration, however, still has the final word. In addition to having access to an appellate committee, faculty members can submit rebuttal letters at any point in the evaluation process. For example, if a candidate does not agree with the department's recommendation, he/she can send a letter explaining why that decision is incorrect, and that letter then becomes part of the file and will be considered by all the higher-level committees and members of the administration involved in the decision. Thus, faculty members can advocate on their own behalf at multiple points in the process, and often do so successfully.

We believe that the promotion and merit system described above, which is used by all campuses of the University of California, is an important factor in the high productivity of its faculty. The system has enough structure and enough flexibility to allow predictability and diversity of accomplishments. Faculty members know what to expect and trust the system, which rewards performance in its many manifestations. Although expectations are high, both in terms of quantity and quality of publications, the system is not rigid. There are no specific numbers or types of publications required for promotion to the next step, so there is some variation in terms of volume and format. Some faculty members have fewer publications than others, but, if those publications are deemed to be of high quality, they will still be promoted. Thus, the system works well overall.

The principal difficulty with the system is that it is very time-consuming, because in any given year, approximately one-third of all faculty members are up for evaluation. Virtually all faculty members participate in their colleagues' review process every year. In addition to reading all files and voting on them, faculty members may also help draft the relevant promotion and merit memoranda. For example, a faculty member might be asked to draft the research, teaching, or service portion of a promotion memorandum for a colleague. In large departments, each faculty member might have to help draft memoranda for several cases every year. Given the importance of the process, faculty members take this responsibility very seriously and labor hard to produce detailed and thoughtful evaluations. Although the names of the faculty members reviewed are kept confidential, the faculty senate publishes a report each year listing all decisions made, so that faculty members have a sense of the overall rate of success of their colleagues. ⁴

The merit system of the University of California is not designed to punish underperforming faculty—their salaries are virtually never reduced, they simply are not increased until their performance improves. This system recognizes and rewards good performance, acting as a positive reinforcement device, which makes it very effective. Faculty members are always preparing for the next step and often pride themselves in advancing through the system at a brisk speed. It is a true peer-review process that provides valuable information to the faculty members being evaluated, while also benefiting those conducting the review. Being involved in evaluating their colleagues' work every year gives faculty members a sense of what is possible, as well as of what is expected of them, functioning simultaneously as a source of inspiration and a reality check. Accordingly, this process is an integral part of the intellectual endeavors of the University of California faculty, strengthening its *esprit de corps*. The impact of this process on productivity and morale cannot be underestimated.

Faculty members do not compete with one another for limited merit or promotion opportunities. Each individual moves to the next level when he/she is ready. This means that when UC hires a faculty member it must provide the budget for his/her entire career. Each new appointment is a major investment, as no faculty member is ever denied a promotion or merit raise for lack of funds. Faculty members, in effect, control their own destiny, and that gives them a feeling of ownership of the institution. Remarkably, there is very little favoritism and cronyism. Although unfair treatment may occur from time to time, the system is sophisticated enough to correct most problems that arise. Because there are so many committees and administrators involved in each decision, any problem developing at one level can usually be caught and fixed at another. So faculty members feel comfortable with the promotion and merit process, which they generally find fair.

All American research universities have rigorous peer review systems for promotion and merit, which is why there is an extensive bibliography offering advice to evaluators and candidates alike (Diamond; Bakken & Simpson), and the University of California probably has the most comprehensive and democratic peer review system of all American research universities. The faculty senate of the University of California is considered the most powerful in the country, in large part because it has such a strong influence on the faculty promotion and merit process. Indeed, the uniformly high performance of the University of California

⁴ See: http://academicsenate.ucdavis.edu/cap/CAPOC%20Annual%20Report%202008-09.pdf

faculty has often been attributed to its exacting promotion and merit system (Graham & Diamond, pp. 149-150; González, 2011, pp. 138-139), which has played a crucial role in the cultivation of talent.

Work-Life Balance

An important issue with regard to talent cultivation is the matter of work-life balance. Because the assistant professor years usually coincide with the family formation period, many young faculty members have problems with the tenure system. Faculty members with small children tend not to be as productive as those who do not have them. This is particularly true of women, but men also have expressed a significant degree of concern, as most of them have working spouses or partners with whom they share childrearing responsibilities. In consideration of the stresses caused by the confluence of the biological clock with the tenure clock, some universities now offer work-life balance policies. UC Davis, along with UC Berkeley, was a pioneer both in the UC system and in the country, in terms of articulating work-life balance policies (Mason; González, 2004).

At present, the campus allows and encourages assistant professors to extend the tenure clock for one year for each birth or adoption event, in addition to offering one quarter of paid leave and a second quarter of modified duties, including a lower teaching load. Costs for this program are assumed by the central administration in order not to tax small programs, which might otherwise feel that they could not afford to offer this benefit. In the event of a sick parent, spouse/partner, child or other family member, accommodations are possible, but the central administration does not cover this benefit, which is offered by departments on an ad hoc basis. Work-life balance policies are perceived less as a benefit to the individual faculty members than to the university, as they facilitate the recruitment and retention of top-level faculty members. In some cases, these policies have been the added value that made UC Davis more attractive than other prestigious universities with less enlightened attitudes about work-life balance. The idea behind these policies is to facilitate the cultivation of talent, which is really what being a top university is about. As the faculty body has become more diverse, and the lives of faculty members have changed, the promotion and merit system has become more sophisticated to allow the university to remain competitive in the prestige race. In the highly competitive environment of the global economy, the ability to recruit and retain first-rate faculty, whatever their personal circumstances, is the key to success, and this is what work-life balance policies provide.

WUHAN UNIVERSITY

Faculty Ranks and Salaries

China, which developed a Western-style university model at the end of 19th Century, suffered terrible losses in its institutions of higher learning during the Cultural Revolution of 1967-1976, when universities were nearly totally destroyed, with college attendance dropping almost to zero. In 1977, breaking with Mao Zedong's policies, Deng Xiaoping began to move the country from a planned economy to a market one, while starting to repair the damage inflicted on the university system by the Cultural Revolution. One of the first things that he did was to reinstitute the college entrance examination. Other changes followed, including the restoration of traditional faculty ranks. At that time, Wuhan University implemented a title-centered faculty appointment system, establishing the ranks of teaching assistant, assistant professor, associate professor, and full professor. In this system, called "iron rice bowl" (Mohrman, Geng & Wang, p. 88), compensation and benefits for the members of each rank were the same, regardless of performance, and promotions were based on job seniority. In 1985, the Ministry of Education created some initiatives to break the guaranteed lifetime employment system, including the establishment of term contracts and merit pay. Decisions about contracts and pay were left to the administration's discretion, with no clear guidelines about who should be appointed or rewarded. In 1999, the Ministry of Education gave Chinese institutions three years to adopt new rules for term contracts and merit pay (Mohrman, Geng & Wang, p. 88). At that time, criteria for appointment and promotion were drafted at Wuhan and other Chinese universities.

After entering the new millennium, the faculty promotion and merit system became more decentralized, and each university was allowed to establish its own criteria, so long as these were consistent with national higher education regulations. Wuhan designed new criteria for faculty promotion and merit in 2004. Further changes took place in 2008, when a step system was created. There are 13 steps: Professor I-IV, Associate Professor V-VII, Assistant Professor VIII-X, and Teaching Assistant XI-XIII. Very few faculty members ever reach the full Professor I step, which is reserved for the most distinguished scholars. Faculty members must compete with their colleagues for each promotion, since the number of positions at each step is limited. Criteria for promotion to each step are extremely detailed and specific and must be met in full, although there are less rigid provisions for scholars who have distinguished themselves by publishing in the foremost worldwide journals such as *Science* or *Nature* or by obtaining unusually high levels of extramural funding, but even those cases must meet specific requirements. In other words, even the flexible track is not that flexible.

⁵ See: http://academicpersonnel.ucdavis.edu/worklife/

The system, which is very dynamic, keeps changing. Recent modifications to the Wuhan faculty promotion and merit system include the creation of five groups of disciplines according to different types of professional activity: basic teaching disciplines, such as Physical Education or Marxist Theory/Ideological Education (no significant amount of research required of professors); teaching-oriented, like Mathematics (some research required); research-oriented, including for example the Center for Chinese Traditional Culture (highly specialized research required); teaching and research-oriented, like Philosophy or Education (a balance between teaching and research required); and, finally, social service, a category that applies to all disciplines (applied research and strong grant activity required). Promotion and merit criteria are customized for each group of disciplines, which assign different weights to teaching, research, and service. In some disciplines, faculty members have a choice in terms of how their performance is to be evaluated, and most choose the third category (teaching and research). The goal of these changes is to enhance academic quality by recognizing various kinds of contributions. Yet the promotion and merit system is still quite rigid, and its requirements are very stressful for faculty members, who not only must conform to uniform performance expectations but also must fight to have their accomplishments recognized in a culture of scarcity, in which there is a limited number of positions at each level above that of teaching assistant. Thus, even when a faculty member has met all criteria for promotion to the next level, his or her promotion might not take place due to a lack of an available position.

Wuhan University has a discipline classification system, in which some fields are favored over others, because they are considered more central to the mission of the campus. The leading disciplines, often described as the "dragon's head," are defined by the presence of doctoral, masters, and baccalaureate degree programs of a certain size. Disciplines are divided into three categories: A (doctoral, masters, and baccalaureate), B (masters and baccalaureate), and C (baccalaureate only), which determine the number of faculty positions at each step. The higher the category the larger the number of senior faculty positions that are authorized for a discipline. Thus, a faculty member's chances for being promoted to senior level positions are affected by the discipline in which that person is housed. Among category A disciplines, the quotas are: a maximum of 25% full professors and 40% associate professors, while these numbers are 15% and 35% for category B disciplines and 10% and 35% for category C disciplines, respectively. There are few exceptions to these quotas. A certain number of positions are reserved for research units of national interest or for scholars who have met certain requirements, but the system is still quite rigid, producing feelings of frustration among deserving candidates in the "lesser" disciplines.

Since 2006, Wuhan University has been following a responsibility center management style system in which each unit is responsible for bringing in revenues to cover its expenditures, including faculty salaries. In China, faculty salaries include two components: the base salary, which is a fixed amount of money assigned to each step, and a variable amount of money determined by an annual performance review. The base salary, which is paid by the government, is the same for each step regardless of discipline or institution, with some regional cost of living adjustments (Mohrman, Geng & Wang, p. 89). The performance bonus, which is paid by the institution, is determined by a system of work points that quantify all faculty activities for the year. In addition to research, teaching, and service, departments reward revenue-generating activities such as consulting, continuing education, research for business companies, and government service. The size of performance bonuses depends upon departmental capacity, as well as personal accomplishments. Rich departments offer larger performance bonuses than less affluent ones.

Faculty members who receive performance bonuses make a great deal more money than those who do not. Indeed, the variable part of faculty salaries is now larger than the base pay in some cases, resulting in dramatic differences in faculty compensation at Chinese universities (Mohrman, Geng & Wang, p. 90). The performance bonus system is hard on faculty members, as a large part of their income is insecure. Salaries can drop drastically from one year to the next based on performance, producing a great deal of anxiety and insecurity. Recent scandals involving plagiarism and fabrication of data must be understood in the context of a ruthless "publish or perish" system that punishes harshly those who do not meet its quantity standards. The abundance of low quality books and journals in China is also related to the stress that faculty members are under to come up with large numbers of publications year after year if they do not want to see their salaries reduced considerably. The professoriate's desire to preserve and enhance its income is exacerbated by the current eagerness of the Chinese middle class, to which faculty members belong, to join the consumer society and have access to home ownership and other material improvements (Yang, p. 184).

Faculty Promotion and Merit Procedures

With respect to promotion and merit procedures, at Wuhan, the administration appoints a college-level faculty promotion committee that includes senior faculty members, as well as department chairs and college deans. This committee makes recommendations to a university-wide committee, chaired by the president. In addition to submitting a complete dossier about research, teaching, and service, every candidate must make a presentation about his/her accomplishments before the committee, as well as answer questions posed by committee members. Thus, each promotion process is like an examination. When a committee makes a negative recommendation, the candidate is entitled to appeal the decision and receive a reply within 15 days.

After an initial five-year appointment at a given rank, faculty members are considered for promotion every three years, in the case of associate professors, and every four years, for full professors. Faculty members who cannot get promoted to the next step after two attempts must leave the university. As of 2011, only twenty-six senior professors on the entire campus have completely secure positions, not subject to the contract system. But, as a practical matter, most associate and full professors are permitted to stay. Recent surveys have revealed that seniority, holding administrative positions, and other such factors had a great deal of impact on the promotion and merit process. Needless to say, personal connections also influence promotion and merit outcomes.

With respect to research, faculty members must comply with specific requirements. For example, each published paper must be at least 3,000 words long in certain types of journals and at least 5000 words long in others. Shorter pieces, such as brief articles, book reviews or paper abstracts do not count. Only publications in which the candidate is first or a corresponding author are considered. Conference papers are not acceptable, unless they are indexed by SCI (Science Citation Index), SSCI (Social Science Citation Index), A&HCI (Arts & Humanities Citation Index) and other such indexes. Book chapters and other such publications are acceptable if they appear in a volume with either an ISBN or an ISSN number, but weigh little. Research grants also are important factors and are assigned more or less weight according to the size of the award and the nature of the funding source. Journals are classified into three categories: top, core, and common. Very detailed rules must be followed with respect to the number of publications required in each class of journal for each of the professorial ranks and disciplines. Sometimes, only one journal in a certain field is listed as "top tier," which produces a great deal of anxiety among faculty members seeking to be promoted. For example, the only publication outlet considered a top journal for faculty promotions in the School of Education is *Education Research*. Thus, a faculty member, who, for whatever reason, fails to publish in *Education Research*, is deemed to have no publications in top journals. Given that there are many reasons, other than lack of quality, why an article might not be accepted by a given journal, this requirement places a great deal of pressure on faculty members and tends to undermine their morale.

With respect to teaching, faculty members provide self-evaluations of their work in the annual faculty performance reviews. In addition, the administration often gathers feedback from undergraduate students at the end of each term. There are very few teaching evaluations at the graduate level, although the graduate school is starting to introduce them. Publications about teaching and grants to improve teaching are included in the faculty evaluation process, as are teaching awards. There is a required teaching load for each review period, that is, a certain amount of teaching that must be completed before a promotion can take place.

Traditionally, service, although a factor in faculty performance evaluations, has had a much lower priority than teaching and research. Recent changes, however, have made service more central than before. Knowledge transfer activities involving support for government agencies or business companies are more valued than they were in the past.

In addition to research, teaching, and service requirements, faculty members born after January 1, 1961, must pass an English test administered in China. Faculty members with strong TOEFL, GRE or IELTS scores and those who have a degree from abroad, who are first authors of at least two articles in English published in important journals, or who are first translators of a medium-size book in their fields of scholarship, are exempted from the English test. Beyond the English-language requirement, faculty members must work or study abroad for a significant period of time if they wish to be promoted to associate or full professor. Aspiring full professors and associate professors born before certain dates in the 1960s and 1970s, respectively, are exempt from this rule. These demanding requirements reflect China's eagerness to have the new generation of faculty become more competitive internationally.

This is why Wuhan University has very strict faculty performance evaluation criteria. There is a "survival of the fittest" mentality that—while making faculty members more productive in terms of meeting formal academic requirements—has created a great deal of pressure, which, in the long run, is bound to interfere with their creativity. While establishing formal academic requirements for faculty may have been a good beginning in a country that, until recently, did not have a high level of productivity at its universities, introducing flexibility in the faculty performance evaluation system will be necessary for institutions of higher learning to achieve true greatness. The Wuhan promotion and merit system, as currently constituted, favors quantity over quality and, most importantly, defines accomplishment in very narrow ways, thus marginalizing scholars whose work does not fit the established categories, resulting in a waste of talent.

In addition to flexibility, academic freedom is a necessary condition for discovery of new knowledge. At present, much of the research done in the humanities and social sciences at Chinese universities does not meet international quality standards, due largely to a lack of academic freedom, which has kept scholars in politically sensitive fields isolated from the international community and ignorant of recent publications in their disciplines (Yang, p. 188). This situation has had a disproportionate impact on the work of women faculty, who tend to be housed in the humanities and social sciences.

Work-Life Balance

In China, female faculty members have suffered significant disadvantages (Jie, Bijun & Mow; Kwong & Ma). Most professors are in the science and technology fields, where large numbers of faculty positions have been created in recent times (Mohrman, Geng & Wang, p. 87). This circumstance has resulted in a relatively small percentage of women professors, because they are mostly in the humanities and social sciences, fields that have experienced slow growth over the years. Since the departments where female faculty members tend to be housed have less access to discretionary funds for faculty performance bonuses. women make less money than men do overall. In addition, the performance bonus system, which does not allow for changes in productivity, tends to disadvantage faculty members who, due to family obligations, have periods of somewhat reduced activity, and these are mostly women. Finally, in China, women are required to retire five years earlier than men. Although some highly accomplished professors are allowed to continue to work into their seventies, retirement age for most faculty members is at sixty for men and at fifty-five for women. This greatly reduces the ability of female professors to make professional contributions (Mohrman, Geng & Wang, p. 87). This problem is compounded by the fact that, in China, seniority is more important than in other countries, where junior faculty members can direct doctoral dissertations or join important committees from the start of their academic careers (Gu, Li & Wang, pp. 159 & 183). Forced to retire early, women faculty members have less access to those kinds of activities than men do. Women also have fewer opportunities to obtain research grants or to travel abroad and, in general, enjoy less access to power than men, including a lower representation among high-level administrators (Yang, pp. 185-186). At Wuhan, female professors face the challenges described above, including a constrained professional life with limits on both ends; lack of flexibility during the family formation years, which handicaps their career development, and premature retirement, which brings their careers to an end before they have peaked. This represents a huge loss of talent.

Thus, an area that needs improvement is work-life balance. Although women faculty members get time off at basic salary (that is, minus performance bonus, which represents a considerable pay cut) when they have a baby, the promotion and merit clock does not stop. Their performance evaluation will not be delayed because of their personal circumstances, which causes problems for their careers. Thus, it is the confluence of these factors—the lack of appropriate work-life balance policies, the rigid faculty performance evaluation system, their heavy representation in the least well-funded fields, and their forced retirement at age fifty-five in a system that favors seniority—that conspire to keep women faculty from succeeding academically.

Because women faculty members' problems are simply an exaggerated version of the problems afflicting all faculty members, measures aimed at addressing their issues should have a beneficial effect on the entire system, which needs to be more open, flexible, and attentive to cultivating talent in its many manifestations. For example, forced retirement at age fifty-five is worse than forced retirement at age sixty, but both represent a waste of talent. A later retirement age for both sexes or, even better, no mandatory retirement age at all, would maximize the utilization of talent.

Chinese universities have done the right thing by establishing ambitious academic goals. As a result, they have accomplished a great deal in a short period of time. As they improve, however, their inflexible requirements will increasingly interfere with faculty productivity. The next step for the Wuhan promotion and merit system should be to allow the faculty to control its own destiny. Scholars need inspiration. Their work has peaks and valleys and changes over time. The faculty performance evaluation system must be nimble enough to capture the various manifestations of creativity and to encourage professors to set and achieve different goals at the various stages of their academic careers.

CONCLUSION

Compared to their UC Davis counterparts, faculty members at Wuhan University are in a precarious position, as they enjoy less job security and academic freedom and have very little control over the promotion and merit process, which is in the hands of the administration. These constrains make it difficult for Wuhan to attract faculty from other countries, including members of the Chinese Diaspora, who are accustomed to better working conditions and are loath to give them up. If Wuhan wants to become a world-class university, it will have to address these issues.

In order for a promotion and merit system to succeed, certain important conditions must exist. First, faculty members must believe that the system is fair and know what to expect. Second, they must have some degree of control over the evaluation criteria. Third, rewards must be significant and punishment limited. In other words, the "sticks" should be small and the "carrots" big. Finally, advancement should not be limited by external constrains. Zero-sum promotion and merit systems that limit the number of people who can succeed do not motivate the professoriate to do its best work. On the contrary, faculty members are suspicious of the process, which they see as a ploy to reduce their overall compensation and recognition (Sutton & Bergeron; Hanley & Forkenbrock; Colbeck; Taitt; Arreola; Bakken & Simpson). The best merit advancement system will be that which offers positive reinforcement for the accomplishments of individual faculty members and bolsters institutional morale.

The UC Davis promotion and merit system comes as close to meeting all of these requirements as any system we have seen, although it could use some additional flexibility. For example, the need for periods of reading and reflection is not sufficiently recognized. A faculty member who needs to spend a few years doing research for a major book still must produce a significant number of publications for a merit increase, even though producing those publications will detract from the more important task of writing the book. Some clear provisions must be made for those engaged in time-consuming long-term projects.

Wuhan University is at a different stage of development and, therefore, its need for flexibility in its faculty promotion and merit process is more dramatic. China's institutions of higher learning are in a rush to transform themselves into research universities, and they are doing this by aggressively weeding out underperformers from the professoriate. The problem is that, by doing so, they are also pulling out small, delicate shoots that have the potential to grow into strong, healthy plants. More discerning care will be necessary to foster talent. Thus, less quantitative, and more qualitative, analysis of faculty performance and potential is necessary, as is freedom from the tyranny of disciplines and the artificial limits they place on faculty development.

One area of concern for both universities is commercialization or privatization, that is, a system that puts universities in the position to have to seek private funds to support their activities, often by commercializing their services. Curiously enough, this trend is more pronounced in China, an officially communist country, than in the United States, the traditional cradle of capitalism. As we have seen, in some ways, Wuhan University has taken privatization farther than UC Davis has. For example, at Wuhan, which has a responsibility center management style system, faculty salaries vary from department to department and, within department, from year to year, according to changes in departmental revenue. At UC Davis, although there are differences in compensation among the colleges, with some professional schools, like medicine, law and business, having salary scales higher than in the arts and sciences disciplines, salaries are more or less consistent across each large group of disciplines and do not vary from year to year according to the availability of funds. This is an area where we think that China has gone too far, and the United States, which is now moving in the same direction, should think twice before following its lead. Faculty members need a consistent and predictable system of compensation if they are to do their best work. For this reason, we advise caution with respect to UC Davis's current plan to implement a responsibility center management style system. Although market forces cannot be ignored, they must not be allowed to rule supreme, because, if unchecked, they will produce distortions and dislocations and destroy the fabric of the university. Thus, as the global economy continues to unfold and to unleash strong currents favoring privatization, visionary leadership will be more important than ever before, as the only force that can keep academic priorities straight and market forces in check. This is a critical moment for universities, and their leaders should take warning. If ever there was a moment in the history of higher education when vision was needed, this is it.

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