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Higher Education Forum

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Postmortem for the Current Era:
Change in American higher education, 1980 - 2010

Roger L. Geiger*

Abstract. *The current era* of higher education in the United States commenced in the years around 1980. Three historical trends crystallized in those years and accelerated in the following three decades. In the non-selective sector, the large majority of students attend underfunded institutions that graduate fewer than half their students. In the selective sector, institutions have conformed to serve a relatively affluent clientele through restrictive pricing, comforting ideologies, and abundant resources. Graduate education and research in major universities has prospered during the current era, with American research universities setting a model for "world-class universities." American higher education thus presents three different faces, which largely pertain to three different clienteles. These three faces define a good part of whom colleges and universities serve and what they provide entering the second decade of the 21st century.

The weakness of the non-selective sector reflects a disinvestment in public education during this era. The flourishing of the selective sector has paralleled the growing inequality of wealth in the United States since 1980. Research universities have gained growing recognition as central institutions for knowledge-based societies and have consequently drawn support for this role from multiple sources. Each of these developments represents a stark reversal of conditions that characterized American higher education through the 1970s.

Keywords: American higher education, university research, privatization, financial aid, admissions selectivity, vocationalism, educational stratification, elite culture

Introduction

This paper seeks to define and characterize the *current era* of higher education in the United States. By this label, I do not mean just the present condition of American colleges and universities, but rather the historical era that commenced in the years around 1980. I argue that three historical trends

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crystallized at that time and accelerated in the following three decades. Undergraduate education has bifurcated into selective and non-selective sectors that have been growing increasingly distinct. In the non-selective sector, the large majority of students attend underfunded institutions that graduate fewer than half their students. In the selective sector, institutions have served a relatively affluent clientele through restrictive pricing, comforting ideologies, and abundant resources. The third face of American higher education – graduate education and research in major universities – has prospered during the current era, with American research universities setting a model for "world-class universities" that inspires both envy and emulation. American higher education thus presents three different faces, which largely pertain to three different clienteles. These three faces define a good part of whom colleges and universities serve and what they provide entering the second decade of the 21st century.

Each of these faces has been shaped by powerful social trends of the current era. The weakness of the non-selective sector reflects a disinvestment in public education, part of the neo-liberal and anti-tax movements that sought a reduced role for public services generally. The flourishing of the selective sector has paralleled the growing inequality of wealth in the United States since 1980 (Golden & Katz, 2008, pp.46-57; Frank, 2007). Universities, finally, have gained growing recognition as central institutions for knowledge-based societies and have consequently drawn support for this role from multiple sources. Each of these developments represents a stark reversal of conditions that characterized American higher education through the 1970s.

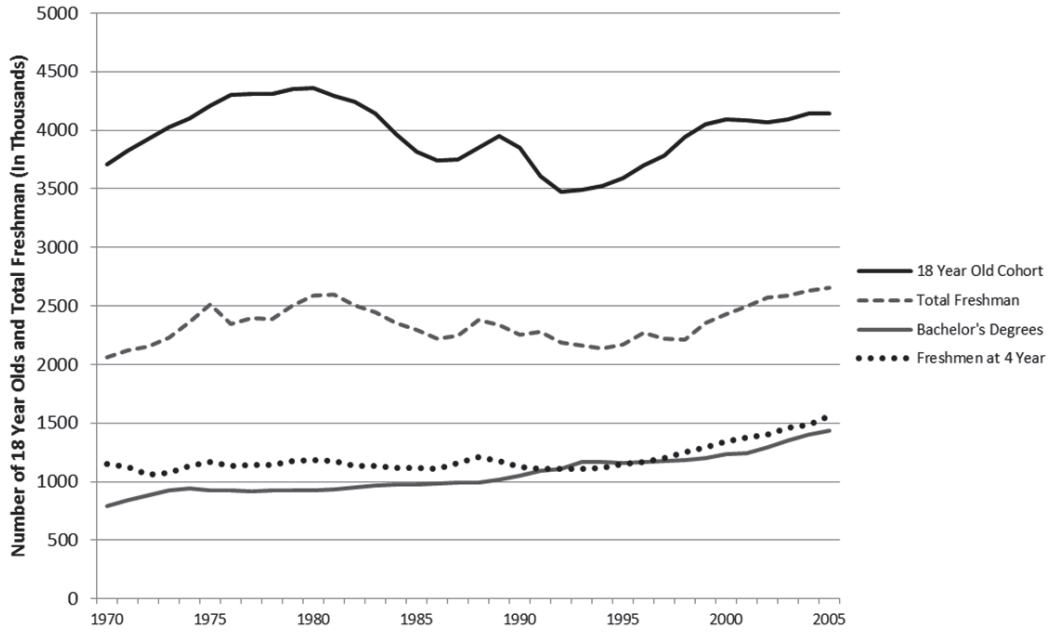
I. The dismal 1970s

The 1970s are generally depicted as a difficult decade for higher education (and much else) in the United States, a hangover of sorts after the exuberant growth and anarchic turmoil of the 1960s. I called a chapter on this decade, "surviving the seventies," reflecting what appeared to be a dearth of resources in the stagflation economy and public disenchantment with universities (Geiger, 2004a). In a longer term perspective, however, these conditions should be seen as the exhaustion phase of three of the strongest secular movements of the mid-twentieth century – the end of demographic expansion in enrollments, the culmination of a growing 'publicness' of higher education as a whole, and consolidation of vastly expanded federal responsibilities for academic research.

Enrollments in U.S. colleges and universities doubled from 1951 to 1961 to about 4 million. Then, as the baby-boom cohorts graduated from secondary school and participation rates rose, an additional half-million students enrolled each year until the early 1970s. Total enrollments topped 11 million in 1975, but then, for the first time in U.S. history, higher education virtually ceased to grow. Total enrollments crept upward after a few years, but a large proportion of students for the next two decades matriculated at 2-year community colleges, where most attended part time and where completion rates were poor. Entering full-time freshmen did not surpass the 1975 level until 1998

(Figure 1).

Both culture and career considerations influenced these developments. A pervasive alienation from academic culture characterized the aftermath of the student revolt and evolved into a generalized disillusionment with colleges. Such feelings were expressed in a huge defection from traditional academic subjects – the humanities, social sciences, and education – toward vocational majors, particularly business (Geiger, 2006). The preference for community colleges also reflected a discounting of academic values. These attitudes were reinforced by a poor job market that depressed the wage premium received by college graduates and led to exaggerated charges of 'overeducated Americans' (Goldin, Katz & Kuzieko, 2000). Pundits extrapolated that far worse conditions lay ahead. Chiefly, these factors affected males, whose graduation rates fell by 17 percent in the seventies, while the gains that women had been making leveled off for about five years as well. In 1980, women became the majority of students in higher education – a salient feature of the current era (Goldin, Katz & Kuzieko, 2000).



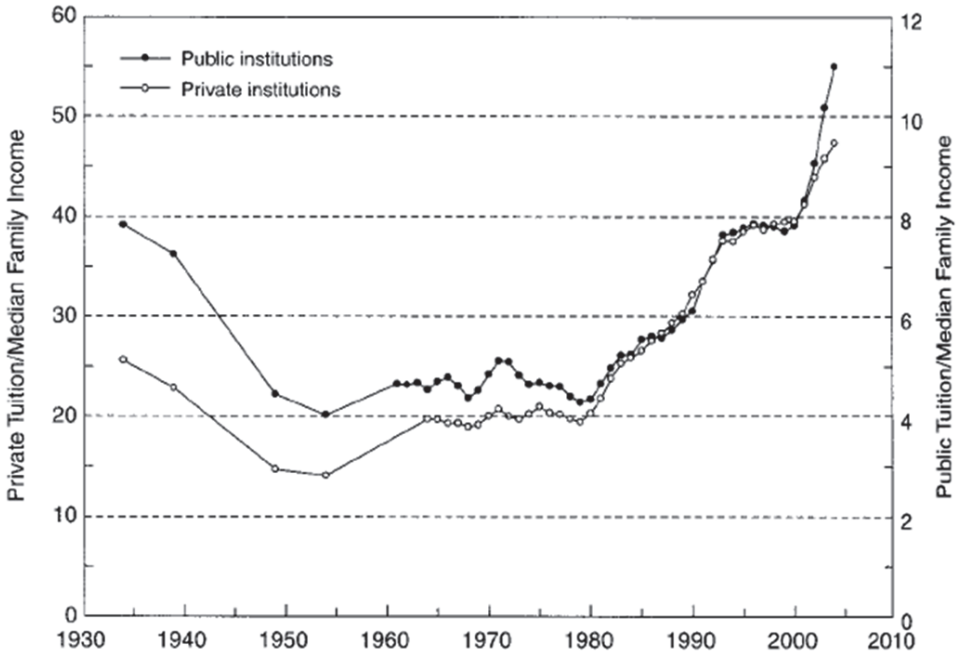
Source: Digest of Education Statistics (2007)[1]

Figure 1. 18 year old cohort, total freshmen, freshmen at 4 year colleges, and bachelor degrees awarded (1970-2005)

The English language has no word for the opposite of *privatization*. Yet, that is what occurred from 1945 to 1980 in American higher education (as well as other spheres). American states poured enormous resources into building public systems of higher education: flagship universities were

[1] *Digest of Education Statistics 2007*, Table.189 (http://nces.ed.gov/programs/digest/d07/tables/dt07_189.asp)

expanded and outfitted for an extensive research role; teachers colleges grew into regional universities; public urban universities multiplied and grew; and a vast array of community colleges was built. These institutions absorbed the bulk of the additional students, so that the public share of total enrollments, which was 50 percent in 1950, reached 79 percent in 1975. The seventies are perceived to be a time of financial hardship – "retrenchment" was the watchword – but real public funding actually increased until the last years of the decade, reaching its highest level for per-student outlays in 1977. Real tuition at public institutions declined modestly (*i.e.* increased less rapidly than inflation). Moreover, the Education Amendments of 1972 provided a huge new infusion of public funds for higher education, later called Pell Grants.



Source: Goldin & Katz (2008), p.276.

Figure 2. Tuition prices as a percentage of median family incomes, 1930-2005

The opposite side of this growing 'publicness' was the perilous condition of the private sector. With widespread concern that many private colleges would be forced to close, federal student financial aid legislation in 1972 was consciously designed to help keep the private sector viable. Even institutions with large endowments saw the value of those funds shrink along with alumni gifts. Private colleges and universities experimented with ways to become more affordable, more vocational, and/or more accessible to a broader clientele. Private tuitions were stable for the decade relative to family incomes as institutions feared to raise prices in the face of falling demand (Figure 2).

The last years of the seventies thus represented the high-water mark for public investment in higher education. They also constituted the apogee of access for U.S. students to low-cost, well-furbished, publicly supported postsecondary education. Interestingly, low costs and wide availability did not sustain enrollment growth, as just indicated. Public funding for access was not accompanied by public confidence in higher education.[2] In fact, the extent of public social expenditures began to be challenged. Internationally such sentiments were addressed as the 'crisis of the welfare state.' Still, no one in these years foresaw a resurgence of private higher education.

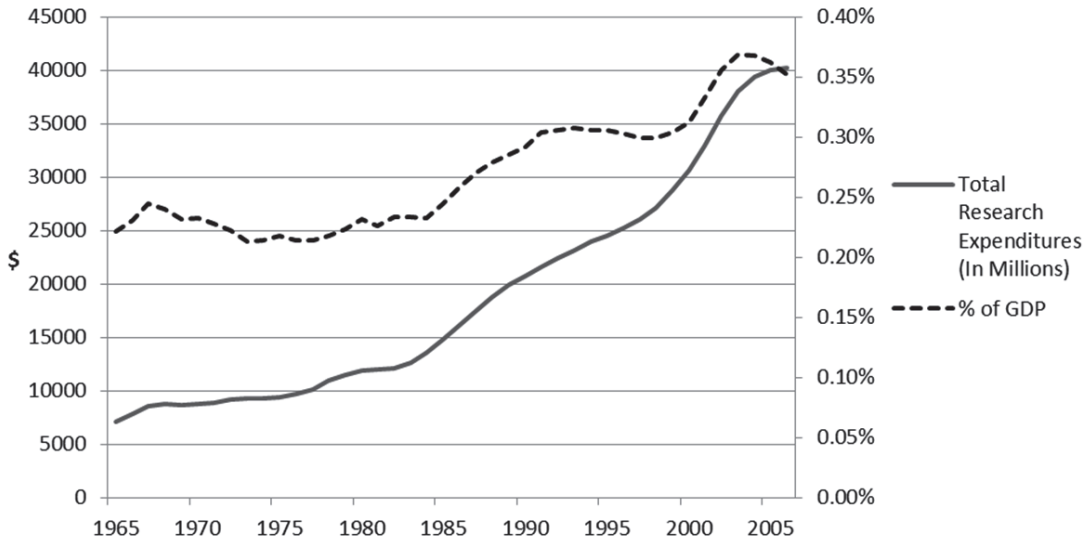


Figure 3. University research expenditures (millions of 2000$ and as a percentage of GDP), 1965-2005

Burgeoning federal support for university research created a 'golden age' for a decade after the launch of Sputnik in 1957, but funding for research in the 1970s stagnated and assistance for universities was drastically curtailed (Figure 3). Expenditures for academic research were flat from 1968 to 1975, and rose only modestly until the mid-1980s. More significantly, an air of pessimism hung over the academic research enterprise. Federal agencies, taking their cue from politicians, sought practical results from research investments with programs like the NSF "Research Applied to National Needs" and the NIH "War on Cancer." Universities, after being hammered for performing defense research, generally harbored an ivory-tower mentality, preferring the kind of pure academic research that had received such bounteous support after Sputnik (Geiger, 2004a, pp.173-97). They were thus doubly frustrated by the contraction and redirection of federal research funding. Ties with

[2] While access was a widely shared objective, reflected in the Education Amendments of 1972 and the build-out of community colleges, lack of confidence was expressed toward university appeasement of radical students and rising nominal costs (which reflected inflation). One expression of this was the imposition of extensive federal regulation.

industry were sparse, with some notable exceptions. Overall, industry supported just over 3 percent of academic research.

In sum, the forces that had long sustained three vast historical movements – enrollment growth, rising public expenditures, and growing commitments to research – were by the end of the 1970s exhausted. Moreover, the premises on which they had mobilized people and public spending were now being challenged. An additional factor – a wild card of sorts – was the inflation that raged during those years, increasing the cost of living by 50 percent from 1978 to 1982. Rapidly rising prices drove home the sense of crisis and encouraged willingness to try new initiatives. The election of Ronald Reagan to the presidency in 1980 certainly reflected a change in the zeitgeist that ultimately conditioned changes in higher education. However, a series of largely independent developments set the course for the current era.

II. The current era, 1980-2010

Privatization – the financial revolution

Early in 1978, Harvard University made a policy decision to boost its tuition price substantially and, in compensation, to increase student financial aid with internal funds. Already the most expensive college, it boosted tuition by 18 percent, from $4,450 to $5,265. Experiencing no drop in student demand, Harvard continued to raise tuition aggressively, by an annual average of $840 for the next ten years. Before these hikes, Harvard tuition was 4 percent above comparison institutions; by 1984 it was 12 percent higher. But not for long. Yale and Princeton immediately followed Harvard's example, and this pattern soon spread throughout the private sector. Private colleges gradually realized that high tuition was a signal to upper-middle-class students and parents of membership in the elite, selective sector (Geiger, 2004b, pp.36-42).

This development was facilitated by another event, also in 1978. The system of federal financial aid established by the Education Amendments of 1972 rested firmly on the principle of providing taxpayer support strictly on the basis of financial need. Thus, grants, loans, and even college work-study all had family income caps. However, a popular reaction soon emerged, invoking the pretext of rising costs (although inflation was the real culprit: see Figure 2). The "middle-class squeeze" became the rallying cry for families that were supposedly being priced out of higher education. Congress responded by passing the Middle Income Student Assistance Act. This act raised income limits for student grants (now, Pell Grants), which had little impact, and removed all income limitations for Guaranteed Student Loans (GSL), which had major consequences. The volume of loans quickly mushroomed, more than doubling to $9 billion from 1977 to 1980 and becoming the largest component of federal student aid. Income caps were re-imposed in 1981, but the volume of GSLs did not decline – in fact it rose slowly until 1992, when terms were again liberalized, touching

off another upward ratchet. Higher education had tapped into a new source of revenue – the future earnings of its students – and it would only encourage the 'loan culture' that this spawned. Congress obliged with new kinds of loans without subsidies or income caps (Hearn, 1993; St. John, 2003). (See Figure 4)

The combination of institutional financial aid from private institutions and easily available student loans created a system of finance for the private sector: *high-tuition/high-aid*. By using the standardized "expected family contribution," plus any eligible grants and student loans, college financial aid offices could determine the maximum amount a student could afford to pay. Institutional financial aid, or tuition discounts, then could cover the difference between financial capacity and the official sticker price. Soon, only fairly wealthy students paid the sticker price at most private colleges, while others paid variable prices determined by the financial aid office. Colleges thus extracted the maximum revenue from each aided student, while avoiding price resistance in the form of reduced demand. They were thus free to raise tuition for those who could afford it while providing an appropriate tuition discount for those who could not.

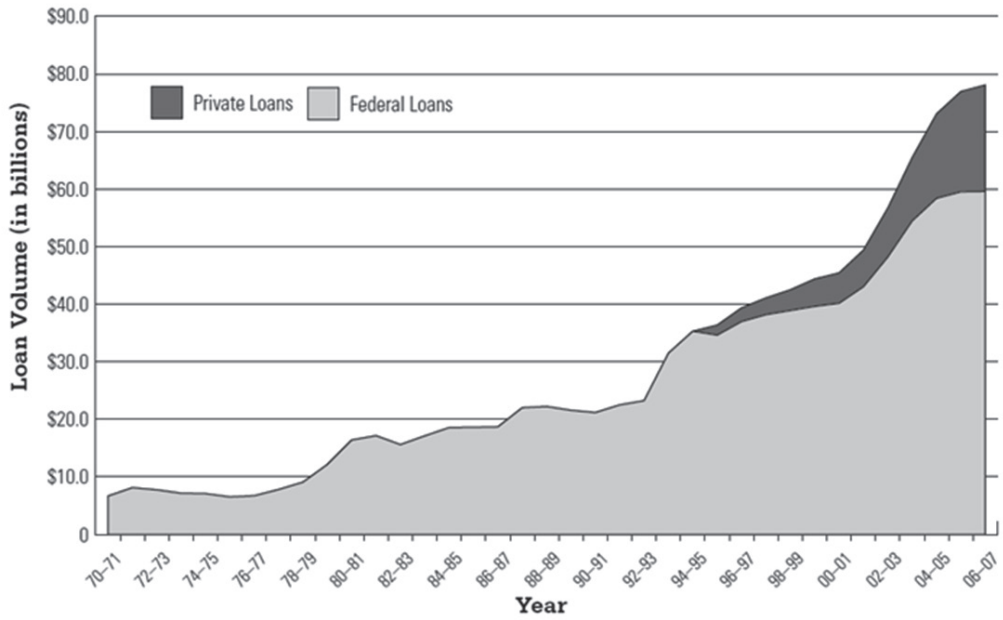


Figure 4. Federal and private student loans, 1970-2006 (current $)

Public colleges and universities cannot engage in tuition discounting – technically, price discrimination – to any significant extent: they have too many middle-class students and too few wealthy ones. But they compensated for stagnant state appropriations by also raising tuition. They too benefited from the loan culture. In fact, significant privatization occurred. In 1980, student tuition provided roughly 20 percent of operating funds, but by 2006 that figure had risen to 43 percent.

Thus, over one fifth of operating costs at four-year public universities were transferred to students, their parents, and their loans (Geiger, 2004b, Chapter 2).

Privatization brought a striking reversal of fortunes: in the current era private colleges and universities have fared much better than public ones, with the wealthiest institutions far outpacing the rest. For public universities, in particular, competing with their private counterparts has been one factor driving rising costs.

Student loans have been an indispensible component of privatization. For 2007, federal and private loans totaled $86 billion, $60 billion to undergraduates. This total exceeds all public appropriations to higher education ($74 billion), and nearly equals the total national tuition bill (net) of $92 billion. The 2008 survey of student aid reported that 70 percent of students at 4-year public institutions were receiving financial aid (average $8,000-10,000), two-thirds as loans; more than 80 percent of private students received financial aid ($16,000-19,000), roughly split between loans and tuition discounts.[3] Most important, the post-1980 financial regime has allowed institutions in both sectors to dramatically raise the relative price of higher education. Figure 2 shows tuition prices in both the public and private sectors rising dramatically and consistently after 1980. This rise contrasts starkly with the remarkable stability of relative pricing from 1960 to 1980. How have American universities been able to more than triple their sticker prices? The process was greatly abetted by a growing demand for places at prestigious colleges characterized by high prices, high expenditures, and selective admissions.

Revival of elitism – the selectivity sweepstakes

The 1980s witnessed an intensification of the competition among students for places at prestigious, selective colleges and – reciprocally – competition among these colleges for the best students – the *selectivity sweepstakes*.[4] These processes were scarcely new, but they had been overshadowed in the seventies by the prevailing anti-elitism and alienation. A number of factors undoubtedly favored this transformation of the zeitgeist:

- Revival of the job market and college wage premiums, particularly opportunities for highly paid careers
- Generational rebellion against the dour, anti-business rhetoric of the seventies
- Intense marketing efforts by colleges to boost applications and enrollments
- The beauty contest, or league tables first established by the *U.S. News & World Report* rankings in 1983.

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[3] *Chronicle of Higher Education, Almanac Issue, 2009-2010*, 13, 33;
Christina Chang Wei, *et al*., *2007-08 National Postsecondary Student Aid Study. First Look.* (NCES: April, 2009). http://nces.ed.gov/pubs2009/2009166.pdf

[4] The following draws from Geiger (2004b), Chapter 3.

However, such factors ignited and amplified fundamental market forces that had long been at work.

The prime mover in unleashing these market forces was the integration of a national market for higher education over the last 50 years (Hoxby, 1997). The enlargement of the market for selective institutions by itself tended to produce increased segregation of students by ability level. Top students, given greater choice, tended to prefer institutions promising academic quality in terms of faculty, facilities, and fellow students. Peer effects resulting from the latter, in fact, are particularly important due to the role good students play in educating one another. Colleges and universities clearly recognize the value of such students and do all they can to attract them. Since the most effective inducement over the long run is academic quality, they chiefly resort to qualitative competition.[5] Increased spending for the enhancement of quality serves not only its immediate purpose, but by attracting more top students it has an additional peer effect – a multiplier – which boosts quality further still.

Qualitative competition spurred private colleges and universities to augment educational spending through the policy of high tuition and high aid. The most prestigious institutions – those with high demand – have been best able to make this approach work to their advantage. In this respect, prestige helps to optimize tuition revenues. Prestige also appears to be a critical factor in attracting voluntary support. Prestige for these purposes comes in different forms. However, academic distinction, particularly in undergraduate education, seems to be the most potent factor in unlocking the generosity of alumni donors. High costs among private universities correlate closely with the prevalence of high-ability students. High levels of spending, in other words, promote higher student quality. This pressure for ever-more spending among the country's wealthiest universities is now conventionally called the "arms race."[6] But for all institutions that can run in this race there are benefits to belonging with the 'selective sector' – of competing in the selectivity sweepstakes.

A catalyst for creating these sweepstakes was the appearance in 1983 of the first ranking of colleges by *U.S. News & World Report*. The initial rankings were based solely on reputation, and thus mirrored wealth, selectivity, and visibility. Still, they proved enormously popular, and from 1987 they appeared annually with a more complex methodology and more numerous categories. For the leading private institutions, they soon carried significant consequences for the number of applications, the yield of matriculating students, and amounts of financial aid needed to recruit a class (Monks & Ehrenberg, 1999).

There is no strict definition of the selective sector. It is widely noted that perhaps 50 institutions

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[5] Economists measure quality in terms of wealth or spending, but students appreciate the effects of spending in campus amenities, *etc*. The alternative to qualitative competition (greater spending) is price competition, which in its cruder forms tends to restrict inputs, attract less qualified students, and diminish quality.

[6] Gordon Winston (1999) writes of this situation, "hierarchy based on donative resources become highly skewed"; however, any attempt to opt out of the arms race would be "fiduciary irresponsibility"; "in a positional market, there's [sic.] never too much of a good thing … and in the hierarchy, wealth is fundamentally a good thing" (p.27, p.31).

actually reject more students than they accept, and possibly only five still practice 'need-blind' admission. In fact, many 'selective' institutions reject fairly few applicants. Rather, the distinguishing feature of the selective sector is qualitative competition: in the words of economist Gordon Winston, "competition in the input market for scarce student (and faculty) quality that will improve a school's educational quality and position" (Winston, 1999, p.30; Geiger, 2004b, pp.84-85).

In practical terms, the top of the selective sector is quite obvious, while its nether border is indistinct and indistinguishable. Private research universities almost all belong. So do the top fifty liberal arts colleges, and a good number of less selective institutions that wish to be associated with them. Large public research universities belong in part; that is, they compete in the same input markets for students and faculty, even though they are less exclusive in whom they admit.[7] In addition, a handful of smaller public universities have attained recognition for selectivity and undergraduate quality. All told, perhaps 15 percent of first-year students at four-year institutions, drawn predominately from the top quartile of that cohort, matriculate in the selective sector. What is certain, student demand for these places has grown significantly during the current era. Reciprocally, the number of institutions engaged in qualitative competition has also grown appreciably, and, more tellingly, qualitative competition has grown far more intense. The effect has been a general migration of the most able students into the selective sector. This can be documented with rising SAT scores (against a stable distribution) and growing concentrations of the highest scoring students (700+ scores). Hence, one of the salient characteristics of the current era has been the growing differentiation of the selective sector from the rest of American higher education (Hoxby, 2009).

Economists have attempted to determine if attending a selective institution enhances career prospects, and why. Findings are unequivocally positive on the first issue. For example, attending a tier one college (top 44 institutions) has a substantial positive effect on earnings, and attending a tier two institution (next 85) has a smaller positive effect. Moreover, these differentials have been increasing in the current era. As for explanations, the evidence seems to indicate that selective colleges are effective at identifying students with personal attributes conducive to successful careers, other things being equal, and that their college experience (treatment) has positive effects as well.[8]

Careers and vocations

In the early 1970s, somewhat more than 40 percent of beginning students indicated that "being very well off financially" was an essential or very important objective. By the 1980s, that figure had risen above 70 percent and more recently to 77 percent – the highest score for freshmen "objectives".

[7] For a working definition of the selective sector, social scientists have divided American higher education into seven tiers. Tier one consists of 44 institutions, all private except for the three military academies. Tier two is 85 institutions, 65 private and 20 public research universities. See Soares (2007), pp.176-177.

[8] These studies are summarized by Soares (2007), pp.130-135, pp.176-177; and analyzed further by Zhang (2005).

American higher education has always balanced a combination of cultural and vocational goals, but the current era has obeyed student preferences for training for jobs. Education scholars Norton Grubb and Marvin Lazerson regard our greatest educational success as "the creation of a mass system of higher education inextricably linked to occupational purposes. Students come to get ahead, to become credentialed and licensed to the labor market" (UCLA Higher Education Research Institute, 2008; Grubb & Lazerson, 2004, p.68). The 2006 Report of the Spellings Commission challenged colleges and universities to go further down this path: "to address the fundamental issues of how academic programs and institutions must be transformed to serve the changing educational needs of a knowledge economy" (U.S. Department of Education, 2006, p.xii). However, there is a difference in how students are 'credentialed and licensed' for their economic roles in the selective and non-selective sectors.

The decline of the liberal arts and their displacement by vocational subjects occurred at the outset of the current era among non-selective institutions. The regional comprehensive colleges of state systems were most affected, as were the bulk of the nonselective private colleges. Business was an initial winner as students voted with their feet for occupation-oriented studies, and business baccalaureate degrees rose to 25 percent of all graduates in the mid-1980s. However, business became so popular that enrollment limits were imposed at many schools, and its share of graduates has stabilized at around 22 percent. Institutions in these sectors have been open to new fields that sought the dignity of college degrees. This was the case with some health professions (*e.g.* physical therapy), security services, and leisure studies, for example. In a sociological analysis of this phenomenon, Steven Brint and associates found "a particularly strong occupational emphasis in institutions enrolling a high proportion of students with low test scores and, by implication, from lower socioeconomic backgrounds." By further implication, the authors perceive these institutions to have become "mass terminal institutions" (Brint, Riddle, Turk-Bicakci & Levy, 2005, pp.173-174; Grubb & Lazerson, 2004, pp.64-69). The proportion of students at public, four-year, non-university institutions – a good proxy for this sector – has been about 25 percent throughout the current era. The sector of American higher education to expand its share of enrollments most significantly has been for-profit colleges, which are purely vocational. Less than 2 percent of enrollments in 1995, they exceeded 6 percent in 2007. The economic collapse of 2008 has also produced a sudden spurt in community college enrollments – an estimated 17 percent from 2007-2009, with full-time students jumping by 24 percent. In addition, master's degrees, which are almost entirely professional in nature, have expanded in the last two decades – from one for every 3.25 bachelor's degrees in 1990 to one for 2.5 bachelor's in 2006.[9]

The number of liberal arts majors cratered from the seventies to the eighties. However, since then these subjects have staged a respectable recovery, but today the liberal arts and sciences thrive

[9] *Digest of Education Statistics, 2009; "Community College Enrollment Surge,"* AACC Policy Brief 2009-001 PBL, (December 2009).

almost exclusively in selective institutions. These students appear to be no less career-minded than their counterparts at non-selective schools; they merely take a longer view. A large portion of students in the selective sector plans to continue their studies in graduate and professional schools.

Intensification of academic research

The current era for university research was symbolically launched in 1980 with two unrelated events. First, Congress passed the Bayh-Dole Act, which allowed universities to take ownership of inventions emerging from federally supported research. Then, the spectacular Wall Street debut of Genentech signaled the commercialization of biotechnology and touched off the biotech boom (Geiger, 2004a, pp.303-308).

The Bayh-Dole Act (University and Small Business Patent Procedures Act) was an important adjustment of patenting law that created a uniform policy toward inventions resulting from federally financed research. Enacted at the height of concerns over lagging U.S. economic competitiveness, it was explicitly intended to mobilize the fruits of university research for economic development and to make these fruits more accessible to small businesses. The Act required, among other things, that universities file U.S. patent applications on discoveries made with federally funded research and actively seek to commercialize them. Universities also had to share resulting income with inventors and devote the balance to research and educational purposes.[10] Before Bayh-Dole, 25 universities had internal intellectual property offices for patenting and licensing; fifteen years late, every major university had one. Bayh-Dole itself was merely the most prominent of a series of enactments by federal and state governments intended to mobilize academic research to develop and transfer technology to industry. This effort, however, derived credibility and urgency from the revolution in biotechnology.

The discovery of recombinant DNA in 1973 created the possibility of engineering living organisms, but the success of Genentech confirmed a new paradigm for university-industry research relationships.[11] The breakthroughs in biotechnology emerged from the most basic kind of research; yet it pointed the way toward inventions of obvious usefulness. This relationship became increasingly common for "science-based technologies" – areas of pure science with clear commercial potential. In order to contribute to the economy, biotech inventions had to be protected by patents and then licensed to for-profit firms. This was not true for all university-spawned technologies, but biotech set the pattern for the patenting of all university discoveries. New firms like Genentech, whether launched by faculty inventors or entrepreneurs (Genentech had both), proved the most appropriate vehicles for developing many science-based technologies. Hence, the rush of universities

[10] For background, see Ibid.; Mowery, Nelson, Sampat & Ziedonis (2004), pp.85-95; U.S. General Accounting Office (1998)

[11] The following draws from Geiger & Sá (2008).

to establish Technology Transfer Offices. American universities were issued 250 patents in 1980 and 3,600 in 2003.

Patenting and licensing were the most visible outward manifestations of a reorientation of university research. A far larger movement supported research in collaboration with industry or in areas deemed ripe with future economic potential. The National Science Foundation led the effort to force-feed the development of emerging science-based technologies, as with the $1 billion National Nanotechnology Initiative (2000-). State governments also joined this effort, seeking to stimulate academic research that would contribute to local economies. After a flurry of initiatives in the 1980s, a reaction of sorts occurred in the 1990s. However, by the end of that decade states were again promoting technology-based economic development with increasing enthusiasm. Industry has been generally receptive to these initiatives (although critical of the intellectual property claims of universities). The portion of university research funded by industry roughly doubled in the 1980s, from 3 to 6 percent, but has not risen beyond that level. However, the great rapprochement of universities and industry has been a marriage encouraged and sometimes arranged by government policies.

The growing economic relevance of academic research has been a boon to the country's research universities. American society has provided relatively abundant resources in the expectations of furthering innovation and, ultimately, the competitiveness of American industry. Not that these resources have been targeted only on research with commercial potential. Rather, the federal science agencies, leading universities, and large corporate funders have generally realized the necessity of maintaining a healthy, balanced academic research system focused primarily on basic science. The result has been one of the most remarkable features of the current era: from 1968 to 1982 academic research grew from roughly $8 to $12 billion constant dollars (Figure 3). Since then it has risen on average by more than $1 billion each year. University research has gained 1/8 percent (0.00125) of GDP in the current era – a 50 percent increase.

Although there has been a secular trend toward the extension of research to greater numbers of universities, the bulk of these research funds still flow to the laboratories of the same universities. Over the current era, this has produced a pronounced intensification of research. For the 99 research universities that I monitored, enrollments grew by 15 percent from 1980 to 2000, but real research expenditures grew by 128 percent (Geiger, 2004b, p.147). Increasingly, research has become an autonomous mission, only loosely linked (if at all) with undergraduate education. These universities have become critical centers of the knowledge economy, advancing the frontiers of knowledge while providing multiple services as repositories and disseminators. They have set the standard for what are now dubbed 'world-class' research universities.

III. Consequences

The four vectors of the current era – the financial aid revolution, selectivity sweepstakes, vocationalism, and research intensification – all bear an underlying signature by invoking private, as opposed to public or social, interests. They do not necessarily contradict public interests. On the contrary, to significant degrees, financial aid has allowed students with limited means to pursue postsecondary education; the selectivity sweepstakes has sorted students by academic ability so that the most able benefit from the most ample educational resources; vocationalism has prepared students for productive employment; and academic research has helped to revive and sustain the competitiveness of U.S. industry. Rather, these worthy social purposes have operated through incentives to private advantage. Thus, although public policies are involved to a greater or lesser extent, these vectors have derived their force from the market preferences of individual actors. But market relations can bring unplanned and sometimes unwelcome consequences (Ibid., Chapter 6).

For undergraduate education, still the main activity of American higher education, the vectors of the current era have produced a growing bifurcation. U.S. higher education has always formed an institutional hierarchy, but this now looks more like a bi-modal distribution. On one side are relatively unselective institutions. They are heavily vocational, have lower costs and fewer educational resources. Their students chiefly come from middle and lower-middle class backgrounds, struggle financially with loans and jobs, and often attend part-time or irregularly. And their likelihood of obtaining a bachelor's degree in six years is less than 50 percent. On the other side is the selective sector where institutions compete with one another to offer high-cost/high-quality education to the most talented students they can attract. These students come predominantly from affluent or at least upper-middle class families and receive strong academic preparation. Many still require financial aid to meet the staggering prices of private universities and colleges. Most of these students will graduate, often in four years, and the majority will acquire a graduate or professional degree as well.

Thomas Mortenson, who publishes *Postsecondary Education OPPORTUNITY*, has summarized this situation:

> The gap in higher educational opportunity between those born into low-income families and those born into affluent families … has been widening almost steadily since the advent of regressive social policy in the United States around 1980.[12]

For dependent students, his data show 54 percent of college graduates coming from the highest quartile of family income (2008). The modal or average 18 year-old in the U.S. will graduate from high school and enroll in postsecondary institutions, but will have only an even chance of attaining a

[12] http://www.postsecondary.org/default.asp

bachelor's degree. The low output of U.S. higher education – specifically the non-selective sector – is widely perceived to be a problem. Three factors have some bearing on non-completion[13](Golden & Katz, 2008, pp.347-350).

First, lack of adequate academic preparation. This problem is long-standing, but there has been no appreciable progress to date. For reading performance, probably the most critical academic skill, 39 percent of tested 17 year-olds in 2008 were able to "understand complicated information" – the kind of material encountered in college. This was the same level as 1971. These data suggest that one-half of students entering postsecondary education probably lack the reading skills needed for college study. Overall, 28 percent actually enroll in remedial courses (Rampey, Dion & Donahue, 2009, pp.12-13; Parsad, Lewis & Greene, 2003, P.18). International standardized achievement tests also expose the weaknesses of U.S. primary and secondary education. U.S. students' relative performance declines as they progress to the highest grades (Goldin & Katz, 2008, p.328).

Second, the rising costs of higher education. Given the complexity of student financial aid, rising prices appear to affect students from different income strata differently. Lower-income families rely heavily on grants and are reluctant to assume debt. Students from the middle two quartiles rely most heavily on loans. And, wealthier students appear more responsive to career prospects (rising wage premiums) than rising prices. Multiple studies suggest that rising prices discourage college-going among lower-income students, and also induce behaviors, such as part-time work, that are prejudicial to academic success among far larger numbers of non-affluent students. Thus, relatively high prices would seem to have a cumulative effect that discourages persistence more than decisions to enter college. Initial enrollment might be motivated by the substantial wage premium, but high costs and loan debt, especially coupled with mediocre performance, probably exacerbate attrition.[14]

Third, the disinvestment by states in non-selective institutions. This is the flip side of privatization – the scaling down of state appropriations for public non-selective institutions. The lower level of resources at these institutions translates into part-time, adjunct instructors, large or unavailable classes, and fewer amenities. Such cutbacks in the 'supply' of higher education resources have been found to depress educational attainment.[15]

Ironically, the low rate of completion in the non-selective sector has an indirect benefit for graduates of the selective sector. Harvard economists Claudia Goldin and Lawrence Katz have concluded that, "the slowdown in the growth of educational attainment since 1980 is the most important factor in the rising college wage premium of the post-1980 period" (Goldin & Katz, 2008,

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[13] A different interpretation of the college completion is offered in Bowen, Chingo & McPherson (2009). These issues are discussed in Geiger (2010).

[14] Such an explanation seems consistent with research findings: Pascarella & Terenzini (2005), p.416.

[15] "Expenditures per student are important to graduation rates. State governments that ignore this fact and call for higher graduation rates and do not increase funding (but rather cut funding) will not have success" (Blose, Porter & Kokkelenberg, 2006, p.77); Bound, Lovenheim & Turner (2009).

p.303). When considered against the social divide between the two sectors, this situation seems particularly perverse: the non-graduation of less affluent students has bolstered the earnings of more affluent students who do graduate.

In the non-selective sector the challenge is to account for weakness, but in the selective sector it is strength that must be explained. What social forces lie behind the extraordinary popularity of selective colleges and universities? How have they been able to raise prices so dramatically without diminishing student demand?

Economic explanations can answer the second question (how?), but not the first (what?). The increased stratification of higher education has paralleled the growing income inequality in the U.S., which has been driven chiefly by income gains at the top of the distribution. Even so, I calculated that in 2000 only the top 6 percent of relevant households could afford the costs of a selective private college or university. At 2007 tuition levels, a family income of $170,000 was needed to afford the expected family contribution (Geiger, 2000; "Financial Barriers," 2009). The selective sector, even given its social skew, draws from a wider population, and the majority of these students require financial aid. Here the high-tuition/high-aid financial model has worked for both suppliers and consumers. Differential pricing, or tuition discounting, permitted institutions to extract maximal payments from aided students; but it has also offered each student an acceptable price for an elite education. Thus, net costs have risen substantially – and have been willingly paid. However, the burgeoning demand for places in the selective sector has also been a cultural phenomenon.

Higher education may be an investment in building intellectual capital, but it is also a discretionary consumption good, particularly in the selective sector. Parents take pride in the institutions their children attend. These institutions assiduously cultivate their brand names. Students choose the brands they wish to wear, and they wear them for life through identification with the institution and enduring ties with classmates. Parents and students have expectations for college that are strongly conditioned by social class, effectively joining culture and economics.

The selective colleges and universities are pervasively upper-middle class environments. In *Knowledge and Money* I outlined how self-selection of students produces a mixture of very wealthy students, students from highly educated households possessing considerable cultural capital, and high academic achievers from diverse backgrounds. Upper-middle class material culture predominates in these settings in such things as electronics, vacations, culinary tastes, and especially brand-name clothing and accessories. More significant is the creation of a "generalized *cultural* effect [resulting] from a richer casual environment in which students … acquire from one another general knowledge and cultural sophistication." Cultivating such an environment has not been left to chance. "Admissions, amenities, activities, and academics … are the chief arenas in which the competition for the hearts, minds, and tuitions of students takes place" (Geiger, 2004b, p.89, p.116).

The discussion of admissions has thus far focused on meritocratic selection on the basis of academic ability. However, among the most selective institutions all serious applicants have sterling

academic records. Selection therefore is based largely on non-academic characteristics. These schools welcome students with extraordinary talents, but above all they seek out personal and cultural attributes associated with subsequent success. Ironically, the more selective a college is, the more admissions decisions are made on non-academic criteria (Soares, 2007, p.128).

A distressing portion of the 'arms race' of qualitative competition is focused on providing amenities for their upper-middle class clientele. Food and shelter – the necessities of life – have become chips in the bidding war for prized students. In addition to luxurious dormitories and sumptuous menus, impressive student centers and athletic facilities are now indispensible for elite campuses. Still, these are educational institutions. It is less obvious how the curriculum is shaped by the tacit cultural mission.

Selective colleges and universities all teach the basic academic disciplines. Most private schools are strongly focused on the arts and sciences, and interdisciplinarity is lauded almost everywhere – in fact invoked as a pretext for more culturally weighted offerings. General education subjects outside the basic disciplines are likely to carry the most cultural baggage. These are also the subjects that schools highlight in their mission statements and web pages to project a distinctive image. However, distinctiveness is more a matter of style than substance, since all offer variations on similar themes.

Four dominant themes are emphasized in the rhetoric and tacit values of selective colleges and universities. They represent somewhat reinforcing ideologies that might be called a modern quadrivium:

- Multiculturalism or diversity has fervent support on selective campuses. Essentially, these values demand the proper appreciation of race, class and especially gender identities; and they now dominate the humanities, culture studies, and some areas of social science.
- Internationalism, which also emphasizes *difference*, encompasses the impulse to study, visit, and otherwise engage with other parts of the world in order to form 'global citizens.'
- Environmentalism, endemic on campuses since 1970, has acquired renewed urgency now given the fixation on global warming.
- And, civic engagement has been actively promoted as an intended outcome of liberal education.

These four ideologies convey much of the socio-cultural content of an undergraduate education at a selective college or university. However, one must delve more deeply to appreciate how these ostensibly admirable goals are "socially situated," as Pierre Bourdieu might have put it; how they provide the cultural capital of what David Brooks has characterized as the educated upper class (*Cf.* Brooks, 2001).

The culture of the upper-middle class in the current era has increasingly been differentiated from previous forms of elite culture – both the high culture of the arts and the wealth culture of ostentatious consumption. The new class has accepted, and is comfortable with, much of the cultural revolution

of the 1960s and 1970s. Hence, multiculturalism is an ideology that class aspirants readily embrace. On campus, of course, it is offered in radical or moderate flavors. However, to resist multiculturalism would be déclassé – a violation of class. Racism, sexism, or homophobia are now considered to be failings of the lower class. Immunity from criticism gives multiculturalists a free pass to express and sometimes implement exaggerated views, sometimes with counterproductive results (Sidaniius, Levin, van Laar & Sears, 2010). But the basic premises of the diversity ideology are assimilated by aspirants to the educated upper class.

The internationalism espoused by American colleges may appear a bit pretentious, but certainly the goal of making American students less insular is a worthy one. The weakness here is the disjunction between the objective of creating 'global citizens' and the means available. American students do well if they acquire any proficiency in a non-English language, or if they manage to take some U.S. courses in a foreign locale (study abroad). In fact, there are heavy overtones of class in this endeavor. Upper-middle class students have the means to travel and study abroad, and these experiences convey cultural prestige.

Environmentalism has always been an upper-middle class value, since it invariably demands high social spending for ill-defined, supposedly virtuous purposes – and now more than ever given the concern over global warming. Upper-middle class students face few of these costs today. Unfortunately, undergraduate general education courses teach little of the science behind global warming and possible responses. Rather, these courses often seek to convey 'green' values and inspire moral commitment, which tend to encourage symbolic rather than realistic long-term strategies.[16]

Finally, civic engagement connotes an upper-class appeal to leadership – to involvement and influence over government and public decisions. It seems to have displaced a fad for 'service learning,' which typically involved more plebian activities. In practice, the forms of civic engagement that are encouraged are directed toward the other values in the new quadrivium.

My skepticism toward these endeavors stems not from the root purposes, which I share, but rather from the intellectual superficiality of their current content. As promoted in selective colleges and universities, the new quadrivium is designed to appeal to the fashionable beliefs of earnest, privileged 18 year-olds. As such, it suits the clientele quite well for purposes of cultural reproduction: it perpetuates and reinforces an upper-middle class mindset while posturing as promoting democratic values.

The selective sector has thrived in the current era by burnishing its democratic image – meritocratic selection and minority recruitment, assisted by financial aid, to attract diverse and talented students and mold them into critical-thinking, civically engaged, environmentally responsible,

[16] As of May 2009, 637 colleges and universities had pledged to work toward "climate neutrality," as soon as possible. These institutions run the gamut from community colleges to elite private colleges: American College and University Presidents Climate Commitment. (http://www.presidentsclimatecommitment.org/)

multicultural, global citizens. Given bright students, carefully selected faculty, and wonderful facilities, these schools assuredly provide the opportunity for an effective education. However, this project is based upon three forms of hypocrisy that may someday undermine the entire edifice: 1) despite the democratic postures, their essential function is cultural reproduction of an educated upper class, and this is precisely what its principal clientele demands and purchases at premium prices; 2) despite claims of teaching critical thinking and providing a liberal education, the stereotypes embodied in the new quadrivium promote superficial reasoning within rather narrow channels; and 3) despite generous financial aid for a handful of poor students, the economic model of high-tuition/high-aid requires the enrollment of a preponderant number of wealthy students and squeezes every penny of consumer surplus from the merely well-off.

Conclusion

The current era was born amidst the financial turmoil of 1979-1982. At the time, it was impossible to perceive the long-term consequences of actions taken. Amid the noise of contemporary events, truly significant developments only become apparent in retrospect. Change occurred as institutions and individuals adapted to new conditions and learned from their experiences. The great recession that began in 2008 has brought even greater economic turmoil, but the direction of subsequent trends clearly lies in the future. The current era may well have passed, but no indications have yet appeared that its pathologies will become less severe in a new era.

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Student Mobility Revisited

Hanneke Teekens*

Abstract. Talent is a mobile commodity. Mobility lies at the core of internationalization in higher education. This core has been affected by globalization. The 'traditional' exchange of students, researchers and lecturers has become interwoven with the export of knowledge, immigration and capital. Cooperation and competition are becoming increasingly two sides of the same coin. With the emergence of more sophisticated information and communication technology, exchange is increasingly shifting from the physical to the virtual realm, in terms of both people and – in increasing measure – services and products. Spiraling numbers belie the fact that student mobility has come under pressure and is now stagnating in certain countries. In addition, mobility is characterized by a high level of inequality. Due to academic traditions, quality control and visa regulations, student mobility remains closely linked to national interests, despite globalization. Those who claim that mobility is intrinsically a good thing are invited to prove the outcomes. Both governments and individual universities employ internationalization as an instrument to promote self-interest; so do students. These different agendas do not necessarily overlap. This article identifies various aspects of student mobility, their impact and mutual interrelations and argues that, in spite of globalization and the great numbers of international students, the national character of higher education has hardly changed.

Keywords: academic community, global citizen, international classroom, knowledge export, regionalization, shuttle mobility, trans-national education.

Context

In Europe, universities started as communities of professors and students, rather than organized institutions as such. Like his contemporary colleagues during the sixteenth century, Desiderius Erasmus taught at various universities, debating a loyal group of students who followed in his footsteps. Lecture notes would also circulate. These notes were written in Latin, which served as a

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common scientific language by members of various language communities. Outside Europe, historical evidence suggests that foreigners travelled long distances to study at ancient universities in India, China and the Middle East (Rizvi, 2011, p.2). From the start, mobility and higher learning have been inextricably linked.

With the rise of modern virtual communication technology, the concept of an academic community that is not specifically linked to one particular institution is seeing a resurgence, greatly due to the use of English as a global language. Over the last decade, there is an enormous rise in the number of research projects and research papers that involve international networks of scientists across countries. But researchers and students do not automatically fall into the same category. In the context of this article, the focus is on the mobility of students, not on research cooperation. Through the web, all students are now connected with ideas and people outside their own academic community in ways unprecedented until quite recently. In teaching, it is important not to ignore the social implications of this development (Yiliz, 2009). The digital impact on education has changed the landscape of (higher) learning for ever (Wächter, Ed., 2002).

Under the conditions just mentioned, 'actual' student mobility needs continuous reflection. It could even be claimed that the very notion and values of 'the' internationalization of higher education represent a preferential (democratic) political and (neo-liberal) economic bias towards highly developed systems, paying little attention to equity and social issues and developments in other parts of the world. Education discourse in hard financial times tends to reaffirm this proposition (Mayo, 2012). It is essential to reflect, to recall, and rearticulate the central values and purposes of the internationalization of higher education and, in particular, the role of student mobility in *all* parts of the world. The International Association of Universities (IAU, p.9, 2012) launched an initiative to do just that. An ad-hoc Expert Group was established and a draft document is circulating for comments and wider consultation. During the IAU conference in November 2012, the publication with the self-explanatory title *Affirming Academic Values in Internationalization of Higher Education – a Call for Action* was presented.

What encourages students to be mobile is a combination of personal ambition, academic challenge and financial opportunity (Macready & Tucker, 2011; Ferencz & Wächter, 2012). For some, it is a first step to immigration. In countries, for example Australia, where this is the case, the fastest growth in student numbers is in secondary schools, language and vocational education and not in research universities[1]. Knowledge is never produced without the social context of time and place. In a digital world, time and place have become very different entities from the past making the academic context increasingly complex. The fact that international students and home students do not easily mix is well known, but often ignored (Montgomery, 2010). In other words, mobility does not automatically lead to the desired effect: native and international students learning from each other.

[1] see https://aei.gov.au/research/International-Student-Data/Pages/InternationalStudentData2012.aspx

Interaction with the new environment supposes a wide range of cultural attributes. Soft skills need careful nurturing in the international classroom.

In absolute numbers, the mobility of students is growing rapidly[2]. However, the picture changes when we examine the percentage of mobile students. Due to the dramatic rise in the total number of enrolled students around the world, we are now seeing a stagnation or even a drop in proportional mobility. Internationalization, defined as a process in which both incoming and outgoing mobility is stimulated, is a key indicator in measuring the quality of higher education on a systemic level. It is thus important that internationalization is not defined in the narrowest possible terms and reduced to a one-sided focus only on attracting (fee paying) students (Hudzik, 2011). In a globalized world, all students need to acquire intercultural competencies to develop into citizens of the world.

Aspects of mobility

Mobility and the national role of the university

In addition to serving science, higher education serves the national interests of the country in which the university is located. From this perspective, international mobility and higher education are basically at odds, in spite of long traditions in mobility. The 'modern university' developed in the industrial world of the 19th century, in response to the elite's need for trained professionals capable of managing organizations and the state. The promotion of economic and technological interests is part and parcel of this arrangement. The autonomous position of universities in many countries obscures the fact that the interests of the nation state and those of the academic system are actually closely intertwined. All the more so when the state is responsible for establishing and funding the universities. The argument that science is objective and knowledge is universal (especially in a globalized world), is unconvincing in view of the national dependency of most universities.

The role of the university as described above has been adopted around the world, although it should be pointed out that views on its actual implementation and execution have differed greatly. Despite the elitist roots of the university system, the second half of the 20th century saw higher education become an engine of political, economic and social development at large. Within Europe, the Bologna Process developed in response to European national governments' need for a greater education area of which they themselves are part[3]. One could argue that this is supranational legislation and more 'Europeanization' than internationalization in a broader sense.

[2] see http://www.iie.org/en/research-and-publications/project-atlas
[3] see http://europa.eu/eu-life/education-training

Mobility and the export of knowledge

Individual universities in many parts of the world have become very active in attracting (fee paying) foreign students. In so doing, they have transformed internationalization into what has been called in Australia 'the industry' (Davis & Mackintosh, 2011). Under the influence of market forces, the university's national role and task have rapidly become juxtaposed with the individual institution's global ambitions and financial interests. The focus of internationalization in many universities has shifted from academic cooperation and exchange to the export of knowledge (Oxford Economics, 2012). For some universities, the recruitment has shifted away from the home campus to attracting students to oversee campuses, challenging the notion of quality and righteous competition. In the meantime, status and reputation are increasingly determinants in the choice process of students (Wilkins & Huisman, 2011). In countries where recruitment policy is closely linked to immigration strategies, the interest of the state may either coincide or clash with the interest of the individual university. When different stakeholders have divergent objectives, the consequences of mobility are different for the state, the university and the individual student.

Higher education has been subject to the General Agreement on Trade in Services (GATS) since 1995. A new Canadian report demonstrates that international students contribute substantially to the Canadian economy. The report places the total value of international students' presence in Canada in 2010 at nearly $8 billion, up from $6.5 billion in 2008. This makes international education a larger export sector than aluminum ($6 billion) and helicopters, airplanes and spacecraft with $6.9 billion[4]. Other countries make similar calculations to stress the economic value of knowledge exports for the national economy. It is noteworthy that in various countries policy development to attract more international students is now also seen as part of the responsibility of trade boards and tourism agencies, as in Ireland and Brazil.

A strong emphasis on the economic reasons for internationalization conflicts with the idea that higher education represents a public good. There is a diverse range of opinions on the impact this could have on the various education systems and the manner in which they (could potentially) compete and cooperate with one another (Marmolejo, 2012). But the notion of market in higher education is here to stay. A market not only for financial gain, but also a place to compete for talent. This is not to say that market forces and economic considerations will simply substitute for the socio-cultural values underlying most higher education systems. They are deeply ingrained and have a long history (Marginson, 2010; Scott, 2008).

[4] see http://www.csc.edu.cn

Mobility and politics

Countries and regimes with a closed political system ensure that student mobility is restricted. Societies with a more open character and a transparent higher education system will be more likely to promote student mobility. The fall of the Berlin Wall in 1989 and the political breakthrough in Europe marked by the signing of the Maastricht treaty in 1992 had a profound effect on mobility. Within a decade, the number of students participating in European higher education programs rose significantly. The explosion of outgoing student mobility from Asia to other parts of the world in the mid-1980s can also be directly traced to the fact that these countries, on the basis of national policies, 'opened up' both politically and economically during that same time. This is especially true of China. To stop the "brain drain," China launched the '1000-Talents Scheme', set up to lure back the talent that is necessary to make the transition from a manufacturing hub to a world leader in innovation (CSC, 2012). The political turmoil in many parts of the world at this moment may well have important yet unforeseen consequences for international student mobility.

New forms of mobility

Wealthy nations such as the UK, the Netherlands, and Sweden, with an effective higher education system and a steady influx of foreign students, are seeing the outgoing mobility of their own students stagnate. With international travel now within the reach of many, the opportunity of gaining international experience is less of a novelty than in former periods. The attendance of international students in their home institutions brings these students into early contact with foreigners in the international classroom and provides them with international exposure at home. The urge to go abroad is then mainly motivated by the desire to develop one's personal talents, gain work experience or – increasingly – contribute to good causes. As a result, internships and community service are becoming more popular forms of mobility than academic studies in the narrowest sense. Young people are now also more likely to take a gap year in between degrees and diplomas – for example, between bachelor and master, or after secondary school and before entering university – , in order to gain international experience by travelling or doing voluntary work. These activities can be done without paying the (high) fees associated with enrollment at a university.

Cultural interest and individual growth are claimed to support the specific competencies regarded as crucial to our performance as a global citizen in a modern society. In reality the development of soft skills often conflict with the ambitions of a university in the global race for talent, status and money in some places resulting in reluctance of staff to promote outbound mobility.

In various rapidly developing economies, with accelerating capacity in their institutions of higher learning and research facilities, talented young people no longer want to migrate when they can receive their degree at home. The formative years are important for family relations and social

networks, narrowing the wish to do a study abroad to the graduate level or short term exchanges. The so called 'shuttle' mobility and staying in touch at various places becomes more and more in demand. Potentially this could be a way to better sustain contacts and to more easily remain connected to an inspiring professional network worldwide. Increasingly students also want to go to more than one destination. They like to study in various countries. The format of multiple study destinations of the Erasmus Mundus Program has made good use of this important wish.

Mobility flows

Old patterns and new choices

Mobility has long been based on tradition, language and the availability of scholarships (Bandari & Laughlin, Eds., 2009). The Association of Commonwealth Universities is a group of over 500 universities and represents one of the most important international networks, based on the communality of the English language and a shared past. In Spain the largest group of international students comes from Latin America, and in France the largest contingent of foreign students comes from Francophone Africa as do students in Portugal from Portuguese speaking countries. An analysis of the available data in Poland indicates that many international students are of Polish ancestry who received Polish government educational stipends covering the costs of their education and stay in Poland[5].

Currently we are seeing major changes, and new streams developing as a result of political and economic power shifts (Becker & Kolster, 2011). As of yet, the 'traditional' western host countries appear to be insufficiently prepared for these changes. We can expect to see an especially significant rise of mobility within Asia (Chan, 2012). In the coming years, thousands of Chinese students are scheduled to study in India and vice versa. The two sides declared 2011 as "China-India Exchange Year" to encourage education and cultural exchanges[6].

The Malaysian government envisions making the country a center of higher educational excellence by the year 2020. The ministry of education expects to attract over 200,000 international students. Potentially, Malaysia could become the most important regional higher education hub by also attracting well established reputable universities from around the world to set up branch campuses. Increasingly mobility of students will be paired with trans-national education (Morshidi & Razak, 2011).

[5] see http://www.copernicus.org.pl/kontakt/chilczuk_a.htm
[6] see http://www.csc.edu.cn

Capacity building and quality development

In many cases, students opt to take their entire study program abroad if there are insufficient study places in their country of origin (Bandari, Belyavina & Gutierrez, 2011). In most cases, these are students pursuing their first degree. Most international conferences place a somewhat obligatory emphasis on the importance of equal opportunities and call for efforts to counter brain drain. However, the figures speak a different language altogether. The highest percentage of students taking an entire study program abroad originates in sub-Saharan Africa and pursue their first degrees in rich countries.

Governments will attempt to stem the outgoing flow of students in order to limit the risk of a brain drain and the subsequent financial losses to their own economies. An example: in 2009, 160,000 Indian students spent $7 billion abroad. India is now planning to implement legislative measures that would allow foreign universities to provide education in India itself in order to stem the outflow and expedite capacity building. In order to achieve this, the budget for higher education will have to be increased by 55 percent, while foreign universities will be forced to offer their study programs in India at lower tuition fees. Capacity building increasingly requires mutual investments based on cooperation agreements (Bhandari, Ed., 2010).

Governments are more likely to support outgoing mobility in the case of graduate or PhD programs than they are for bachelor's programs. These students are more likely to return to their country of origin, thus helping to strengthen and improve the quality of existing higher education capacity. Chile launched the *Bicentennial Generation Programme*, designed to ensure that 500 new researchers obtain their PhD abroad each year until 2019. The Chilean government has pledged an amount of $160 million to this end. The emphasis will be on joint research and the mutual exchange of knowledge. The Brazilian Science without Borders program aims to educate 100,000 students abroad. Here too, the emphasis is on education formulas based on mobility within the framework of sustainable links with institutions worldwide. In addition, we see a shift from one-sided mobility towards mutual exchange and reciprocity. The Bicentennial Generation Program also benefits students and professionals from other Latin American countries.

Regionalization

The most striking development has been the increased regionalization of student mobility, making up the greater part of overall mobility around the world. South Africa has seen the influx of foreign students rise to more than 60,000, most of whom originate from its direct neighbors, known as the 'SADC countries'. The largest number of foreign students in China originates from Korea. A large proportion is also from Japan and Vietnam. Fifteen percent of all foreign students in Japan are from Korea, while 60 percent originate from China. In South Korea, as many as 70 percent of all foreign

students originate from a single country, namely China. The Bologna Process in Europe may form a basis to further shape this cooperation, as is the case in Latin America (Gacel-Avila, 2008).

Regionalization is particularly prominent in Europe, where yearly over 300,000 Erasmus students study in another European country – pushing the total since the program's inception in 1987 to three million Erasmus students, the number to have participated since the introduction of the program in 1987. Beyond the Erasmus program another 400,000 European students study in another European country, representing just over 2 percent of the total European student population. In Europe the majority of outgoing mobility occurs in small countries such as Liechtenstein and Cyprus, and various new EU member states such as Slovakia, Bulgaria and Estonia. A large number of European students study abroad in countries directly neighboring their own. German students enrolled in the Netherlands represent approximately two-thirds of all European students studying in the Netherlands. Many of these students live just across the border and return to their homes in Germany every evening. Dutch students taking an entire study program abroad generally opt for Belgium. This type of mobility has jokingly been referred to as 'bicycle-based mobility'. Belgians, in turn, represent the third largest group of foreign students in the Netherlands after the Germans and Chinese. In Spain, neighboring Morocco comes first for the inflow of bachelor students.

Narrow distribution of mobility

Large numbers cannot obscure the fact that the entire world is not internationalizing at an equal pace. We are seeing a high level of concentration. Around 45 percent of international students originate from a mere 15 countries, and just six countries receive just over 60 percent of all international students. English-speaking countries are far ahead when it comes to attracting international students, cornering approximately three-quarters of the global market. Of the various English-speaking countries, the US has traditionally been the most important host nation for students from around the world. However, its market share is experiencing a gradual decline. In an interesting development, mobility from and to major countries such as China, the US and Germany is confined to a limited portion of the country. As a result, a vigorous process of internationalization only affects a relatively small number of universities in the countries in question. The number of institutions experiencing a significant level of internationalization is also limited in smaller countries. Dutch students studying abroad in Belgium are mainly enrolled at four Flemish institutions. In the US, the west and east coast are much more popular than the states in the middle of the country.

In certain countries, for example, South Korea, Russia, Poland and Brazil, incoming mobility is almost non-existent. As a result, their education systems are scarcely internationalizing. In order to have an impact on development and quality improvement, in and outgoing mobility must be regarded as a systematic instrument of higher education policy to improve the quality of education. The strong

regionalization of mobility actually points to an increased concentration of mobility in certain countries and within these countries within selected institutions.

Employability and residency

Brain migration is often simply migration. In addition to inequalities in terms of wealth, demographic growth in certain countries and ageing populations in other places will significantly affect global job opportunities and knowledge production. The allocation of work permits will be increasingly linked to the completion of a higher education program. For many students, the reason to go abroad for study is directly linked to the intention to find a job on the international labor market. The number of foreigners participating in PhD programs in Western countries is high, especially in the exact sciences. But more and more students opt for a job after graduation outside the university (Sykes, 2011). The linkage between student recruitment and future employment with the option of permanent residence (the so-called 'stay rate'), has become an important national policy in various countries, *e.g.* Japan, Germany and the Netherlands. These strategies are recorded in concrete plans and target figures. Australia aims to issue visas to skilled immigrants to meet national needs, but independent of education choices of overseas students. The skills and qualifications that countries seek in migrants will vary over time and will be adjusted accordingly. National economic requirements, university policies and student choices sometimes come together here, but not always.

The appeal of 'staying' depends on a great many factors. The number of Chinese students and scientists who chose to remain in the US post degree receipt was so large at one point that it even prompted fears about national security. As a result of greatly improved conditions in the Chinese higher education system and better job opportunities, increasing numbers of Chinese researchers have been returning to their home country over the past few years, at the same time meeting fierce competition on the job market from graduates of Chinese universities (Hao & Welch, 2011). At present, almost half of all Chinese graduates return, a sharp increase compared to five years ago.

In addition to material incentives, graduates are also prompted to stay for reasons of life style and personal freedom. Thriving metropolises are popular: cities with buzz. Recruitment is not restricted to the country where one has graduated. National policies seek to match an international work experience with the country's need for skilled immigration and capacity building to create a knowledge society. The share of graduates that express the desire to stay on is clearly higher than the share that actually do so. In the end language, visa problems and cultural difference often prove difficult barriers. Many also return for the prospect of helping to develop their own country. The wish to be home with aging parents is often another factor, being a strong sense of duty in many cultures. The general image of a country is also important. At the moment many Greek students seek international study and work experience. The push and pull factors influencing the choice to settle in a specific country or to take the decision to return home are of an increasingly qualitative nature.

Conclusions

The enormous rise in mobility over the past 30 years can be mainly attributed to the fact that higher education has become bigger and bigger. The thawing of political dogmas and economic growth, are other reasons. However we have to realize that less than 2 percent of students worldwide are engaged in mobility. The global market impinges on national systems, but on the whole higher education remains national in focus and nature. Moreover, internationalization is often more a regional phenomenon than a truly global one. The positive learning outcomes in individual students as a result of international mobility are widely acclaimed and increasingly well documented. How personal gain and national system improvement relate, remains less researched. Governments are mainly interested in attracting leading talent and highly qualified knowledge workers. But a clear vision or even definition of what 'top quality' means or what 'excellence' entails is missing. Nevertheless governments remain the decisive stakeholder in deciding which forms of mobility are going to be supported or impeded. Working and living conditions, with an emphasis on personal safety and racial tolerance, will become decisive choice factors for students to come and stay on.

Creativity flourishes most effectively in universities with a healthy balance between incoming and outgoing mobility. This serves as another impetus for the transformation of existing one-sided mobility flows towards more balanced two-way traffic and inter-institutional cooperation. Mobility breeds mobility and talent attracts new talent. The one-sided flows from 'west' to 'east' will continue to shift, with mobility expected to see particularly strong growth in Asia's burgeoning higher education systems.

The most important trend in student mobility is the shift from longer to shorter study periods and from single visits to multiple stays. More and more students are interested in gaining international work experience through study related internships. Physical mobility is increasingly supplemented by digital forms of knowledge exchange and transnational education. We see that many students seek their own individual ways to find out about the world and are mobile outside the realm of higher education. How do universities make use of previous learning experience and include it in their academic approaches? How are institutions going to match what students want with what universities offer? These questions represent an enormous challenge for the universities in our respective countries. In the 21st century, universities will have to educate graduates with the capacity to think and find solutions beyond the confines of their national borders.

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Diversity and Quality in Higher Education: A comparison of preferential policies in India and the U.S.[1]

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Abstract. While India and the U.S. have vastly different socio-economic profiles, they have several characteristics in common. Both have very diverse populations in terms of ethnicity, culture, religion, language and so on, very disadvantaged minority populations, as well as very large and diverse higher education systems. As large democracies, they have equality legislation as a foundation of both the American Declaration of Independence and the Indian Constitution adopted after Independence.

Both countries have attempted to redress the historical discrimination of Blacks in the U.S. and lower Castes/Tribes in India, through preferential treatment in education and employment. In the U.S. "Affirmative Action" is a policy in higher education, while in India "Reservations" are written into the Constitution. These measures have made a large difference to the disadvantaged populations in both countries. But it is time to revise them so that a minority among these minority populations does not continue to benefit while the rest are left behind.

Keywords: higher education, diversity, equity, quality/excellence

Introduction

The U.S. and India provide examples for an interesting comparison in terms of preferential policies in education. The two countries have several things in common despite the obvious differences. The estimated populations of India and the U.S. in early 2012 were vastly different: India, with 17.28 percent of the world's population had 1.22 billion people; the U.S. with 4.47 percent of the world's population had around 313 million (U.S. Census Bureau, 2012; Government of India, 2011). The U.S. ranks first in GDP/PPP ($15 trillion), while India ranks ninth ($4.469 trillion) (IMF, 2011). However, both claim to be successful democracies with very diverse populations in terms of language, culture,

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religion, ethnicity, sexual orientation, and so on. Both have preferential policies in education and employment – called "Affirmative Action" in the U.S. and "Reservations" in India – to compensate for the historical exclusion of, and discrimination against, certain groups of people which both countries readily acknowledge. However, discrimination based on race (racism) in the U.S. is a social construct and implies power and domination of white over black; while discrimination based on caste in India is a hereditary transmission of social stratification into which a person is born (and not based on physical/visual difference). Identification by race in America, and by caste in India, continues to some degree despite Constitutional prohibition of discrimination based on caste in India, and laws prohibiting discrimination and hate crime based on race in the U.S.

In the U.S., starting in the 16th century, Native Americans were subjugated by the arrival of white, European settlers. By the middle of the next century, slavery had been officially established and racism was institutionalized. In India, the caste system dates back to the arrival of the Aryans in 1500 BC. Because discrimination is still deeply embedded in the economic and social aspects of the caste system, and amplified historically along the lines of gender and class as well, equality and equal opportunity issues are incredibly complex in India. While an egalitarian legal framework replaced the caste-based system with the adoption of the Indian Constitution in 1950, equality and diversity issues have been at the forefront of the post-colonial state since its independence 65 years ago. Of course, social attitudes are slow to change, and the politicization of equal opportunities has further complicated the issue. Paradoxically, although caste is not visually obvious, people have to claim and prove their marginalized status – the very circumstance they want to overcome – in order to derive benefits from public policies.

Preferential policies

Several countries around the world (including China, Japan, South Korea) have special policies giving preferential treatment to specified groups of people. In August 2012, Latin America's largest country, Brazil, enacted one of the Western hemisphere's most sweeping Affirmative Action legislation called the law of Social Quotas. While controversial, it nevertheless drew wide support from lawmakers who were seeking to reverse the racial and income inequality in Brazilian society (New York Times, August 31, 2012).

Very few issues in higher education have been as controversial as admissions policies that consider special factors other than merit for entry of particular groups. While these policies are aimed at providing accessibility to jobs and educational opportunities to groups that have been historically excluded, they do change the existing opportunities for majorities and clearly upset the status quo. Controversy arises mainly around two issues: fear of deterioration in quality, and accessibility to elite groups given that a limited number of students can get admission each time. In a system of higher education, the matter of quality is undoubtedly important. In this article we will focus on the first

issue, that of quality. Can excellence be achieved without compromising equity and diversity? The connection between the two concepts becomes problematic and even contradictory: the democratic model demands equal access to all in education on the one hand, whereas on the other hand, from the point of view of human capital theory investment should be based on individual productive capacity (Strike, 1985).

The issue is one of balancing quantity with quality. Will quality suffer when higher education institutions become socially and culturally inclusive? Since the concept of diversity inevitably involves intertwined complex issues, the question therefore is whether excellence can be pursued along with inclusive policies that involve students from disadvantaged backgrounds who may not have the knowledge and skills for pursuing higher education.

The most common argument used against democratization policies in higher education is that they downgrade the quality (standards and excellence) of higher education institutions as established by the elites. This belief is generally prevalent despite several comprehensive studies and empirical evidence on the issue indicating a positive correlation between the two (Bowen & Bok, 1998). In the U.S., as in India, a diverse population is generally still seen as a threat to a merit-based system, as well as to democratic values and national unity (Lamont & de Silva, 2009). Furthermore, public discourses that are dominated by the elites in both societies often indicate hostility towards "positive" discrimination policies that challenge the current state of things no matter what criteria are used.

The conflict therefore is at a basic level of individual rights colliding with collective rights: individuals feel that collective rights lower standards in order to admit less prepared groups from disadvantaged backgrounds. On the other hand, there are fewer places available to individuals from elite groups when competing for admission in universities because students from minority groups are given preference. Democratic societies like India and the U.S., through legislation and policy, hope to reduce inequality in society by not only considering collective identities, but also by "assigning them a certain pre-eminence over individual identities" (Bèteille 1986, p.122) in order to level the playing field. Herein lies the conflict: individual rights protect the individual while collective rights protect the rights of individuals identified by group characteristics. Often the rights of a group clash with rights of an individual; and this is a major problem in admissions policies when there is preferential treatment for particular collectives. The issue is that factors other than conventional standards of merit are the basis of selection. The conflict arises in the tension (even contradiction) between equal opportunity for all on the basis of individual citizenship versus special opportunities granted to groups on the basis of centuries of mistreatment resulting in their underrepresentation in higher education and in power positions.

The importance of education

Without a doubt, the increase in the number of higher educational institutions and in student enrollment has benefitted a wide range of people in all countries both in the North and in the South. But the democratization of higher education, a system which historically was the privilege of the elites, has led to assertions that increases in disadvantaged student populations are to blame for a decline in the quality of education, primarily because of the under-preparedness of students entering the university (Sadovnik, 1994). The poor academic performance of minority group students is linked to the complex relationship between socio-economic class and minority status in general, as well as to historical practices such as slavery and the caste system.

Education has been seen as both an instrument of national development and a means of social mobility. Human capital and modernization theories have spurred governments and aid agencies since the 1950s and the 1960s to invest heavily in education as central to modernization and industrialization. The importance of education became more evident with the recognition that knowledge and power are intimately connected and the demand for education in democratic societies increased. Modern democratic governments became very much aware that unfulfilled, rising expectations lead to politically volatile situations. The awareness of education's potential to help people realize their aspirations for a better life, the democratization of education, and the expression of human rights (and the women's rights movement), have together led to a great uprising in the world; there has been a revolution of rising expectations. The expectation that all who participate in the worldwide education revolution will benefit from the economic advantages of globalization is the greatest challenge facing the world today.

The following section will briefly discuss the concepts of diversity, equity and quality.

Diversity

In general, diversity is understood as an expression of differences in ideas, beliefs and values, and not only in structures, but also in people: the potential of a spectrum of perspectives derived from multiplicity. It is influenced by our various *locationalities* (historical, global) and *positionalities* (race, gender, religion, class, language, sexual orientation). People are positioned by their characteristics and conditions of birth and position themselves in and through them – although these are not fixed. Where and how a person is situated in a society leads him or her to live through a particular set of experiences and to encounter distinctive power relations. It is in this other sense, the political or power relations aspect that the concept of diversity must be understood. The intersections of one's positionality such as gender, caste and class, or race, religion and sexual orientation, combine to produce different and distinctive experiences for each individual.

Diversity is expressed in many ways in the higher education system. In countries like India and the U.S., which have enormous numbers of tertiary institutions, diversity includes a variety of large and small institutions that entail differences in quality and standards both within and across categories or types. Disciplinary diversity is also an important factor. Furthermore, socio-demographic diversity in students, faculty, administrators and staff (gender, race/ethnicity/culture, religion, language, socio-economic ability, sexual orientation); preparedness of entering level students; aptitude and ability in different areas; and other factors all impact heterogeneity in higher education. Diversity policies operate at various levels in the higher education system, mostly in connection with the allocation of resources: admissions policies, faculty composition and compensation, distribution of competitive research grants and fellowships, administration make-up, and institutional culture.

In the U.S., diversity was used to justify preferential treatment based on race for the first time in 1978. In *Brown v. Board of Education of Topeka* (1954) the Supreme Court unanimously declared segregated public schools unconstitutional arguing that integration of various races and ethnic groups in the educational environment would lead to increased educational outcomes for all students. This decision paved the way for the Civil Rights movement in the U.S. Almost 25 years later, in the landmark Supreme Court case *University of California Regents v. Bakke* (1978), Justice Lewis Powell supported race-targeted Affirmative Action that would enrich the quality of the learning experience for all students in higher education by promoting an "atmosphere of 'speculation, experiment and creation'… through wide exposure to the ideas and mores of students as diverse as this Nation of many peoples" (Gurin, Dey, Hurtado & Gurin, 2002, p.331). Educators in the U.S. have argued that a diverse student body enriches the educational environment for both dominant group and minority students alike, but it is only recently that the educational and social benefits of diversity in higher education and the conceptual links between diversity and learning have been researched and supported with data. A growing body of scholarship (Bowen & Bok, 1998; Gurin *et al*., 2002) over the last fifteen years has presented research results linking diversity to a wide variety of desirable individual and institutional outcomes in higher education, including learning outcomes, social outcomes (*e.g*. democracy and citizenship skills), and economic benefits (returns to students, the larger community and in international competition). Structural diversity, or simply proportional representation in terms of student enrollment, is a necessary but insufficient condition to maximize benefits; regular, meaningful interactions with all kinds of people in the classroom, and especially in informal situations was found to be the most effective (Gurin *et al*., 2002).

In India, which is diverse in multiple ways, diversity and inclusion tend to focus on caste and class although the concept has multiple meanings in terms of ethnicity, race, geography, and religion. But even though the concept of diversity involves multiple kinds of differences, *de facto,* its implication has been limited through the construction of specific meanings and, in the American context diversity has focused on racial (Bell & Hartmann, 2007) and cultural difference. Despite the fact that the understanding of race and ethnicity has no basis in evolutionary biology or genetics, it is

the social interpretation of the controversial word "race", and an awareness of differences in ethnicity and its connotations, that has kept the concept alive. Since 9/11, religious differences have increasingly become important as a marker of diversity, especially in the U.S.

Pandey (2010a, 2010b) explores the concept of diversity in relation to difference. In his cross-continental comparison between *Dalits* (lower caste Hindus) in India, and African Americans in the U.S., he points out that the notion of diversity has been seen as one of population segments revolving around a center. This assumes that the organizational structure of society is already defined. But difference is fluid; it appears "differently in different places" in "innumerable forms" and along multiple axes (Pandey, 2010a, p.6). What is more, difference is often misconstrued as deviance (a liability) rather than as uniqueness (a resource).

The very categories that make women, African Americans, Native Americans, lower castes, sexual minorities, and immigrants different are the very labels they wear in order to demand special treatment and claim a privilege for certain categories of difference.

Equity

The declaration that all human beings are equal does not mean that they are identical. Equality suggests similarity rather than "sameness." Human beings are similar by virtue of belonging to the same species (*homo sapiens*), but they are born unequal in multiple ways. Because this inequality arises from each person's or group's *situatedness* and *positionality*, access to education is more challenging for individuals from groups that are subordinate in social relations of power. Equal treatment cannot mean the *same* treatment for those that are under-privileged vis-a-vis the groups that are over-privileged (*cf*. asymmetry of power); rather, it must mean *fair* treatment. To treat everyone in the same way would continue to result in unfair treatment, as some are dealt disadvantage and unequal power from the start. Linguistic, socio-economic, cultural, and (dis)ability differences, for example, can pose tremendous disadvantages for students at all levels of education. Equity would then mean being treated fairly and according to one's needs (Rawls, 1971).

Globally, there is consensus to provide primary education for all children. Increases in student enrollment in basic education has been a major policy incentive, especially in countries of the South (EFA, 2000). There is debate, however, about access to higher education: Is it better to have a very exclusive higher education system for a small number of highly capable students, or should resources be spread over a larger group of students with varying abilities and aptitudes? Should special efforts be made to incorporate students from certain groups who would otherwise not think of education at the tertiary level? Most importantly, should these special efforts override the access to students from the elite groups, even if they are highly qualified?

In promoting social and economic progress towards a just society and a peaceful world, higher education institutions seek, on the one hand, to attract the most creative students with the highest

potential for achievement and, on the other hand, to provide a learning environment that is rich and varied. It follows that the wider the pool of potential talent, the greater the chances of multiple intelligences, multiple perspectives and innovation. A dramatic difference has taken place in the discourse on diversity in the U.S.: the focus has moved from seeing a diverse population "as a polar opposite of excellence to becoming one of its defining features" (Maher & Tetrault, 2007, p.5). Thus, diversity and excellence need to be inextricably interrelated (Bowen, Kurzweil & Tobin, 2005).

Quality

If the concepts of diversity and equity are problematized in relation to the notion of quality, then the concept of quality must also be deconstructed. What is quality? Quality is expressed in terms of excellence and standards. The definition of excellence can be both at the individual and collective levels. It is a comparative term and is considered to be the opposite of mediocrity.

In their study of three U.S. universities, Maher and Tetrault (2007) conclude that excellence is not so much a mark of quality as a mark of privilege, as the elites who "control the norms of the scholarly enterprise" (p.4) use their power to keep new groups away with subtle barriers to entry. They point out that focusing on individual merit "masks" acquired group privileges that are often secured at the expense of groups whose positions in terms of race, color, class, gender and sexuality put them at a disadvantage.

Quality is measured in terms of a student's ranking relative to a particular and usually a mainstream group, while testing indicates student mastery of certain educational objectives. When we refer to educational standards in higher education, we actually refer to both. First, institutions need to have a certain level of attainment, which is measured by a set of criteria that may include factors such as quality of the faculty, research productivity, standards for the library and other resources, *etc*. Then there are standards of excellence that are determined in relation to competition because the idea is for the institution to do better than others (nationally or internationally), especially in an economically competitive world. Excellence is generally taken to mean high achievement in meeting given standards of performance; very often it denotes standardized test scores in student admissions, objective criteria, *e.g*. publications, in evaluating faculty performance, and multiple factors when ranking institutions. Still, the U.S. Supreme Court decision *University of California Regents v. Bakke*, 1978 reconceptualized excellence in higher education by making diversity a part of its definition, considering it a "compelling interest" that makes the educational experience richer (Lamont & da Silva, 2009, p.2). Likewise, the UN Task Force on Standards of Excellence for Public Administration Education and Training defines standards of excellence in educational institutions as having, among other factors, an "unwavering commitment … to diversity of ideas and of participation … Both forms of inclusiveness, intellectual and participatory, are the hallmarks of excellent programs." (UN-DESA/DPADM, 2008, p.6).

The concept of excellence in a system of higher education involves quality and quantity, as well as the interaction of these two factors (Bowen *et al*., 2005). The issue of quantity becomes significant in the need to get the best; the larger the enrollment, the greater the number of students from diverse backgrounds such as socio-economic class, ethnicity, culture, religion, language, sexual orientation. The larger the pool, the more likely it is that the talent base will be enlarged. But this matter of scale is also a problematic issue in the case of trying to meet a certain quota of students because some very qualified students may not gain admission.

Furthermore, who defines the standards of excellence? The marketization of higher education has stressed quantitative performance at the expense of ethical, equality, and diversity issues. Maxine Greene, John Gardner, Howard Gardner and others who have discussed the concept of excellence and standards have all focused on a quality of the mind, on the need for a "plural" and multidimensional context consisting of "frames of mind" (Gardner, 1983) and originality (Vijh, 1999) that go beyond what can be quantitatively measured. Excellence can cover a wide spectrum of talent and achievement. In judging educational quality, Bowen *et al*. (2005) point out that not only is the process of measurement very subjective and extremely difficult, but that the designation of the "best" will vary due to different capabilities, needs, and interests of students across different institutions and programs.

Postmodern writing, which is associated with the validation of diverse narratives, suggests that we not only need new vocabularies and new discourses but also new meanings for old vocabularies. The authors of *In Search of Excellence* (Peters & Waterman, 1982) suggest that the meaning of excellence "requires wholesale revision" (Peters, 1987, p.4; Vijh, 1987). In exploring how to expand existing educational vocabularies, particularly those that might be used to stifle change, Nel Noddings (1993) points out that the definition of the word "excellence" is by no means fixed and varies greatly within a limited range of meanings and contexts. A "unitary orientation" (Greene, 1989, p.9) cannot fully define meanings because cultures and people have multiple perspectives, multiple intelligences, and many ways of knowing, believing, doing and valuing. Standards are of utmost importance, yet quality has been defined out of particular experiences of those who have the power to define standards and make the rules. Maxine Greene (1989) argues that attention must be paid to difference, integrity, and respect for the other. In his powerful book *Excellence: Can We be Equal and Excellent Too?*, John Gardner (1961) emphasizes that an excellent system of higher education must provide education for all, and that excellence should be seen in every legitimate sphere of activity.

It is not that excellence and diversity are conflicting ideals, but that they may cause tension because our interpretations of these concepts are defined by our ideologies, and, therefore, our views on the goal of education (Strike, 1985). For example, at one time private elite institutions in North America invoked diversity as a justification for creating quotas that excluded Jewish candidates (Lamont & da Silva, 2009). Now there is discussion on Jewish overrepresentation at elite institutions in the U.S. (MacDonald, 2010). This illustrates how concepts and their meanings change with moving points of reference. In a democracy, however, the objective must be to have principled ways of

balancing conflicts rather than rejecting concepts that seem contradictory to one's preferred ideological position.

A brief comparison of preferential policies in India and the U.S.

How can diversity and quality be interpreted in the light of the experience thus far in India and the U.S.? Although the underlying motive of educational policy in both countries is to provide opportunities for education and social mobility to under-represented groups that have been historically marginalized, there are some important differences between Affirmative Action in the U.S. and Reservations in India. Affirmative Action is not written into the Constitution of the U.S. whereas in India there are several Constitutional provisions for Reservations.

India

India's preferential policies, among the oldest and most comprehensive in the world, were first introduced by the colonial administration just after World War I, as a matter of governing policy in the form of quotas (Bèteille, 2003). The founders of modern India did not agree with the existing quotas, which they saw as advancing the policy of "Divide and Rule" by the British. While they thought group-based Reservations would be politically divisive, they needed legislation to make special arrangements for certain groups in the new India. Dr. Amebedkar, independent India's first Law Minister, who himself was from a scheduled caste, argued for the inclusion of positive discrimination in favor of the Scheduled Castes (SC) and Scheduled Tribes (ST) in the new Constitution.[2] Adopted in 1950 after Independence (1947), the Constitution, while protecting a wide range of rights of individuals, also included special provisions for those groups that had suffered extreme social disadvantages through the ages. Traditional collective identities of caste and kinship were repudiated although paradoxically, identification with lower caste and tribe would be needed for Affirmative Action claimants. The special provisions for groups were treated as matters of right rather than of policy. Article 15 prohibited any discrimination based on caste, Article 17 declared any practice of *untouchability* as illegal. The Untouchability (Offenses) Act (renamed the Protection of Civil Rights Act) extended the reach of law from intent to mandatory enforcement, and the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, similar to the Hate Crime Laws in the U.S., were enacted as well (Wikipedia, 2012). Since then, several amendments have been added to extend Constitutional provisions for preferential treatment of designated groups. The very first amendment to the Indian Constitution was made after the *State of Madras v. Champakam Dorairajan* (1951) decision by the Supreme Court to deny caste-based Reservations in college seats so that an upper caste woman

[2] By 1975, 841 Scheduled Castes and 510 Scheduled Tribes were identified on a list or schedule. http://en.wikipedia.org/wiki/Education_in_India Accessed March 26, 2012.

could enter medical college. Many court cases have challenged the legality of these provisions. Gradually, caste quotas were widened to include quotas in legislative bodies (mandatory provisions) as well as Reservations in education and employment (enabling provisions) at both the central and state government levels for SC and ST. In the caste quotas for education and employment recommended by the Education Commission (Government of India, 1981), the meaning of Reservations remained the same but was extended to include additional disadvantaged groups, labeled as Other Backward Classes (OBCs). OBCs, while not stigmatized on the basis of caste are nevertheless acknowledged to be socially and economically handicapped. This extension was severely opposed by the public, resulting in violent riots, and led to political upheaval with the fall of Prime Minister V.P. Singh's government in 1990.

The U.S.

Affirmative Action in the U.S., as a policy (1965), has changed since the time President John F. Kennedy envisioned it to assure equality of opportunity for all citizens and to end discrimination against historically oppressed groups such as African Americans. It has developed into policies (not legislation) that give preference to members of minority groups, with the aim to increase their representation rather than to just eliminate discrimination against them (Weisskopf, 2004). It is of great significance that American Affirmative Action is a matter of policy and not of rights. The phrase "all men are created equal" is in the Declaration of Independence and not in the U.S. Constitution (Nesiah, 1997). The Civil Rights Act (1964), which legally ended racial segregation in the U.S., extended citizenship rights to all persons in the U.S. with equal protection and 'due process' clauses (Deshpande, 2006).

Being a matter of policy, Affirmative Action has been and is still being challenged but it has also enabled universities to argue for diversity as being educationally enriching and beneficial overall, thus avoiding the obvious problems involved in arguing for racial and gender preferences.

Differences in rationale for preferential policies in education

In education, the most significant difference in the two countries is how preferential policies in admission to tertiary institutions are justified. For India, the notion of equality is in contrast to a deeply hierarchical society: and the argument for equality is important in a society that has been perhaps one of the most oppressively hierarchical social organizations in the world. In the U.S., the world's top institutions, to enrich the educational experience and environment of tertiary institutions, have aggressively supported the need for diverse representation in the student body, as well as in the faculty. As mentioned earlier, diversity emerged as the central argument in favor of Affirmative Action in university admission policies after the landmark 1978 Supreme Court case, thus taking the

focus away from redress (Lamont & da Silva, 2009) or historical discrimination of some groups and placing the emphasis on educational benefits. Yet the court rulings on race as an admissions criterion have not been consistent. In December 2011, the Obama administration set out new guidelines urging "colleges and universities to get creative in improving racial diversity at their campuses" (Dillon, 2011), essentially reversing the Bush government's 2008 document warning tertiary educational institutions against using race as a criterion. In 2012, the U.S. Supreme Court reviewed the case of *Fisher v. University of Texas at Austin*, and is expected – as of March, 2013 – to rule soon on this Court's decisions interpreting the Equal Protection Clause of the Fourteenth Amendment, and whether the University of Texas is violating the Constitution by including race and ethnicity in admissions decisions. This would require the Court to be either consistent with or overrule the landmark *Grutter v. Bollinger* (2003) case in which the U.S. Supreme Court upheld the Affirmative Action admissions policy of the University of Michigan Law School. Justice Sandra Day O'Connor wrote in favor of promoting class diversity and a race-conscious admissions process among many other factors in promoting underrepresented minority groups. Universities cannot impose quotas or ceilings on enrollment of any racial group. Currently, Affirmative Action in the U.S., simply allows consideration of an applicant's racial background among many factors in admissions decisions. With growing skepticism towards Affirmative Action in American society, the outcome of the *Fisher v. the University of Texas at Austin* case could reshape American higher education.

Access to educational opportunities is an important goal in preferential policies in higher education, but it assumes student preparedness at a certain level. Equality of opportunity is certainly facilitated by the removal of obstacles such as conscious or unconscious discrimination, but absence of bias is not sufficient. The creation of social and cultural assets that Bourdieu and Passeron (1990) referred to as social and cultural capital, which promote social mobility, are of utmost importance. To be more explicit, students entering tertiary educational institutions need a minimum of a high school diploma. Affirmative Action cannot compensate for preparedness (other than through compensatory classes) for those students who have not even had access to high school, not to mention access to elementary education, as is the case for many in India. Nor is it desirable to base selection on minimal conventional requirements, which inevitably sets individuals up for tremendous challenges and possible failure. Policies that target these problems are urgently needed to enable more students from disadvantaged groups to take advantage of preferential policies at all levels of education.

Some progress has been made in India in promoting diversity in universities, but the majority of people from SC and ST populations remain very much outside the higher education system and, consequently, outside the market-friendly areas of software, informatics, and bio-technology (Rao, 2002), for which India has become well-known. Most significantly, SC/ST and OBCs are minimally represented in elite institutions such as the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs). Women from these groups are even further disadvantaged, as women are invariably worse off than the men within their group. Higher educational institutions in India are

unable to fill their quotas at either the student or faculty levels for lack of sufficiently qualified applicants from these groups who still face social discrimination in campuses and university accommodation. Those who have the qualifications to gain admissions do as well as the rest of the students. The solution to finding qualified students to fill quotas is not to lower the bar for admission, but to focus on good secondary education and preparation through language training and other necessary courses. In addition, admissions and selection criteria must move away from traditional one-size-fits-all evaluations.

Who Benefits?

Who benefits most from preferential policies and legislation? In terms of admissions in major U.S. universities, Maher and Tetrault (2007) found that while several had already accepted the twin objectives of diversity and excellence over the last two decades, the resulting diversity of the student body skewed towards upwardly mobile immigrants rather than American-born African-Americans and Hispanic Americans who have historically been disadvantaged groups; not all non-white minority groups benefitted equally from Affirmative Action policies.

In India, there seems to be a vicious circle: the least educated and the most vulnerable people from the SC and ST, as well as OBCs, do not get the opportunity to qualify for the high status jobs where they are underrepresented. Reservations are benefitting a small portion of the SC and ST groups. Generally those who have already benefitted in the past are able to take advantage of the positive discrimination options for their children (and, in doing so, they are labeled as part of the "creamy layer"). In 1992, the Supreme Court imposed an individual eligibility test for OBCs (not SC/ST) who have already benefited from Affirmative Action policies. Because a minority from SC/ST groups have been beneficiaries, the majority remain at the lowest rungs of the labor market. Despite this fact, there has been a general awakening among *dalits* to demand their rights and they have been very successful in gaining political power in State governments. A comprehensive study of the Reservations policy asserts that it has been a partial success (Galanter, 1991).

Conclusion

As educators, we are encouraged to believe that ability is distributed evenly across populations, even if we are aware that social and economic assets are not. The ideals of "equality" and "diversity" both translate into including people who are seen to be unequal and different but undoubtedly with the same potential for excellence as people who have hitherto benefitted from higher education. They both imply social inclusion. The objective of preferential policies is to provide an equitable quality of life and level the playing field for those who have been left behind. In a competitive global economy countries that leave groups of people behind do so at their own risk and to their detriment. In this

respect, Maher and Tetrault (2007) found that newcomers to the academy often influenced innovative approaches to problem solving. As the 1983 Report of the U.S. National Commission on Excellence in Education (NCEE), *A Nation at Risk* points out, excellence and equity must be pursued together and one must not be conceded to the other either in policy or practice. The benefits of diversity go to the whole society and extend beyond any particular racial group.

While the playing field is still far from being level, and labor market outcomes remain significantly lower for groups who have been targeted for preferential policies in the two countries we have discussed, there have been meaningful changes in education and employment in both India and the U.S. The debate over inclusion and academic standards is a common refrain in both countries. Since equality is widely championed but great inequalities still exist, it is perhaps time to sharpen and hone the policies so that a minority among the minority populations does not continue to benefit from preferential treatment while the larger part of these populations are left behind. The eligibility test imposed in 1992 by the Supreme Court of India for OBCs who have benefited from preferential treatment is a good example of how policy and legislation can evolve with the times. There must be an effort to work towards a time when preferential treatment is no longer necessary.

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"Why" and "How" Matter: Student engagement in China's universities

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Abstract. In recent years, the large quantitative expansion of higher education in China has increased not only student numbers but also concerns about the overall quality of higher education. Student engagement in teaching and learning processes and the outcomes of their college experiences become issues for study. The paper uses as key data randomly sampled questionnaires of over 20,000 undergraduate students collected by the National Survey of Student Engagement in China (NSSE-China) research team in 2010 from 24 higher education institutions. The following two questions are the foci for discussion. Firstly, what does "student engagement" really mean for Chinese undergraduate students in different types of institutions, particularly in the context of the social transition and massification of higher education in China? Secondly, what underpins student engagement and stimulates students to be engaged in certain learning activities and what factors influence student choices? The basic points of the paper are as follows: the concept of "student engagement" is culturally constructed. It is reflected in student's behaviors, but rooted in social understandings of "good" or "bad" students. Student motivation is a key component of student engagement, which is not always based on individual choices, but driven by social expectation and utilitarianism.

Keywords: student engagement, higher education in China, effective educational practices, motivation

Introduction

As we move into a global world, the competition for brains and "soft power" which higher education

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represents becomes one of the most crucial issues, especially for the developing countries like China. "Without more and better higher education, developing countries will find it increasingly difficult to benefit from the global knowledge-based economy". Higher education "is no longer a luxury, it is essential to future national social and economic development." (The Task Force on Higher Education and Society, 2000)

In recent years, paralleling its economic take-off, which makes it the world's second largest economy, China has experienced accelerated development in higher education (HE). Between 1998-2008, total enrollment increased more than four-fold and now China has the largest HE system in the world. A total of 25 million students were enrolled in various higher educational institutions (HEIs) in 2009. The big quantitative expansion of HE in China, has increased not only student numbers, but also concerns about the overall quality of HE. In the process of constructing the evaluation system of overall quality, student engagement in the teaching/learning process and the outcomes of their college life have become issues for scholars to explore.

A focus on student engagement

Student engagement is usually defined as the time and effort students devote to learning activities. It is empirically linked to institutional policies and practices that motivate students to participate in educationally purposeful activities, but also refers to the desirable outcomes resulting from institutional practices. (Kuh, 2001, 2003, 2009b) The study of student engagement helps to explain the relationships among student learning behaviors, educational practices of the institution, and related desirable outcomes. Student engagement theory comes from the work of North American scholars, *e.g*., Astin (1984), Pace (1984), and Kuh and his colleagues (Kuh, Schuh, Whitt & Associates, 1991). Although their terminologies differ in describing the concepts of student engagement, the basic premise is that students would learn from what they genuinely engaged in during college (Kuh, 2009a). Many researchers have strongly and consistently supported this assumption, by demonstrating that engagement is positively correlated to test scores and self reports of student learning outcomes (Astin, 1993; Kuh, Kinzie, Buckley, Bridges & Hayek, 2006; Pike & Kuh, 2005; Zhao & Kuh, 2004). The second premise is that students' behavior and attitudes are related to institutional environments. The structural features, programs, policies and organizational culture of institutions also have effects on students' on-campus engagement (Astin, 1984; Kuh *et al*., 2006; Kezar & Kinzie, 2006; Kuh, 2009a). Some student engagement surveys have been designed to assess college student learning experiences and the effectiveness of institutional policies and practices (Kuh, Pace & Vesper, 1997). One of the most widely used instruments is the National Survey of Student Engagement in China (NSSE-China) (Kuh, 2001, 2003). It was originally developed in the context of North American higher education and then adapted by other countries, such as Australia, New Zealand, Spain, *etc*. (Kuh, 2009a). The NSSE instrument offers institutions data regarding institutional performance based on five benchmark

indicators or scales of student engagement. These benchmarks were developed based on previous research in the area of student learning and student engagement, especially the *Seven Principles of Good Practices in Undergraduate Education* (Chickering & Gamson, Eds., 1987; Kuh *et al*., 2006). More specifically, these benchmarks include: level of academic challenge (LAC), active and collaborative learning (ACL), student-faculty interaction (SFI), enriching educational experiences (EEE) and supportive campus environment (SCE).

"Student engagement", as a pedagogical idea emphasizing student input of time and energy into learning activities is not new in China, but as a set of indicators and benchmarks is fairly new for Chinese scholars. It arrived in China several years ago, along with the growth in college student numbers, resulting concerns about the quality of teaching/learning, and the effectiveness of universities in channeling student energy into educational activities serving desirable outcomes of their college life. (Ross, Luo & Cen, 2008; Luo, Ross & Cen, 2009; Luo, Shi & Tu, 2009; Zhu, 2010).

Research purpose

As China's HE system transitions from an elite to a mass one, it becomes necessary for the HEIs to adjust themselves to a much enlarged student body with diverse backgrounds and needs, to consider how to "add value" for different students through engaging them in educationally appropriate activities that contribute to their future development.

The present study aims to explore the patterns of student engagement in different types of HEIs in China as well as the underlying reasons for the patterns. Therefore, the study is guided by the following research questions:

1. How do students from different types of HEIs vary with respect to their level of engagement and their learning outcomes?
2. Why do students from different HEIs engage in learning activities differently? What are the students' motivation for learning and expectation for the future?

In addressing these questions, we need to draw a more detailed picture of undergraduate education in China, including a perspective on how and why students learn. The focus on "how" and "why" issues may lead us to a deeper analysis of the HE system rooted deeply in Chinese culture and society.

Methods

Data source

The data for this study came from the NSSE-China administered in 2010. The NSSE-China Questionnaire, as an instrument, was adapted with permission from the original NSSE-China questionnaire, developed in a pilot project supported in 2008 by the Ford Foundation to promote new

approaches to student-centered learning and process-focused (institutional improvement-oriented) assessment in China. The cultural adaptation of the instrument was coordinated by the collaboration of scholars from Tsinghua University and Indiana University in the U.S. The new items tailored to the Chinese students were developed in 2009 and the Tsinghua Team made further modification of the instrument and updated NSSE-China 2009 to NSSE-China 2010. Led by Tsinghua University, the pilot survey in China was carried out in 2009 and 2010. The data employed in this analysis is mainly from the 2010 survey.

Measures

The NSSE-China 2010 contains all the items for the five benchmarks in order to maintain international comparability. The Cronbach's Alpha standardized check shows that the alpha reliability of NSSE-China is at least as good as that of the original, North American based NSSE: Level of academic challenge (LAC), with Cronbach's alpha as 0.70; active and collaborative learning (ACL), with Cronbach's alpha as 0.67; student-faculty interaction (SFI), with Cronbach's alpha as 0.85; enriching educational experiences (EEE), with Cronbach's alpha as 0.64; and supportive campus environment (SCE), with Cronbach's alpha as 0.79. Responses to most items were measured by a four-point scale.

In order to facilitate diagnosis of existing problems in the teaching/learning process, we constructed several new scales to show the detailed components of teaching/learning activities. For example, students were required to self report their in-classroom (curriculum) learning activities (Cronbach's alpha was 0.70), the extra-curriculum and enlarged learning activities (Cronbach's alpha was 0.62), and gains in university attendance (Cronbach's alpha was 0.90) and satisfaction with the overall educational experience (Cronbach's alpha was 0.80). The scale of gains contained 13 items, which were constructed along three dimensions: gains in knowledge, in competency, and in self concept and realization. The scale of satisfaction contained three items, including satisfaction with the academic advice/supports of the institutions, the entire educational experience, and the probability of choosing the same institution again. For more details of the psychometric properties of NSSE-China 2010, please see *Instruction Manual of NSSE-China 2010* (NSSE-China Team, 2010).

Sample

In 2010, 46 universities/colleges located in different provinces and representing different institutional types participated in the NSSE-China survey. Among them, 24 HEIs were cluster sampled such that the data could be used to estimate nation-wide population parameters by proper weighting. The data in this paper are from these 24 HEIs.

Twenty-eight thousand eight hundred students were randomly selected from among undergraduates (seniors excluded) of the 24 HEIs, and each student was sent a survey questionnaire

with an invitation letter. Twenty-four thousand seven hundred and ninety-six questionnaires were returned, for a response rate of 86.1 percent. Invalid cases were identified by two criteria: (1) low consistency on the answers to a pair of checking questions, and (2) answers containing over 2/3 missing values. Invalid cases were not included in the analysis. As a result, 24,593 cases were deemed valid, with the valid rate 99.2 percent.

The samples were divided into four categories, based on the structures of the educational system in China, including the "985" universities, the "211" universities, local four-year colleges and local two-year colleges. More details of the samples are shown in Table 1. In order to depict the characteristics of student's learning engagement, besides computing the descriptive data, a one-way ANOVA was conducted and Tamhane's T2 test was used to compare the mean scores that students from different types of institutions reported in effective educational practices which were represented by the five benchmarks in the questionnaire. The followings are the basic findings.

Table 1. Characteristics of the samples by type of HEI

Student Characteristics	"985"Universities		"211"Universities		Local Four-Year Colleges		Local Two-Year Colleges	
	N	%	N	%	N	%	N	%
	906	100	1,569	100	14,351	100	7,767	100
Gender								
Male	668	73.9	924	59.0	7,351	51.4	2,477	32.0
Female	236	26.1	642	41.0	6,962	48.6	5,263	68.0
Nationality								
Han	834	93.4	1,419	91.5	13,543	95.5	7,575	97.8
Minorities	59	6.6	141	8.5	630	4.5	169	2.2
Hometown								
Metropolis	180	20.0	66	8.5	1,324	8.8	734	9.5
Provincial capital	96	10.7	139	8.6	871	6.1	291	3.8
Prefecture	183	20.4	277	17.2	2,212	15.6	857	11.1
County	163	18.2	283	17.5	2,532	17.8	1,482	19.2
Suburb country	33	3.7	95	6.1	1,090	7.7	485	6.3
Village	243	27.1	699	42.1	6,230	44.0	3,858	50.1
Total	24,593							

Results

Student engagement in effective educational practices by type of HEI

A one-way ANOVA was conducted to test the statistical significance of differences in student engagement in effective educational practices among different types of institutions. Table 2 reports the mean scores for "985" universities, "211" universities, local four-year colleges and local two-year colleges in five benchmarks.

Table 2. Means and standard deviations on five benchmarks by type of HEI

	"985" universities		"211" universities		Local four-year colleges		Local two-year colleges		*F*
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
LAC [a)]	45.1	12.5	41.1	11.7	42.9	12.6	42.7	12.8	19.91***
ACL [a)]	45.6	45.6	41.1	41.1	43.5	43.5	44.8	44.8	32.11***
SFI [a)]	24.7	24.7	19.6	19.6	23.2	23.2	23.1	23.1	25.93***
EEE [a)]	35.4	35.4	34.7	34.7	32.5	32.5	36.0	36.0	106.20***
SCE [a)]	63.2	63.2	60.1	60.1	62.0	62.0	62.1	62.1	8.89***

Note: * $p<0.05$; ** $p<0.01$; *** $p<0.001$

a) LAC = level of academic challenge; ACL = active and collaborative learning; SFI = student-faculty interaction; EEE = enriching educational experiences; and SCE = supportive campus environment. Limited by the paper length, the results of post hoc analyses were not reported. However, Tamhane's T2 test was used for post hoc analysis if the equal variance assumption was not accepted in Levene's test of homogeneity of variance ($p<0.05$). Otherwise, LSD test was used.

Level of academic challenge (LAC)

Table 3 demonstrates that there was a significant difference on LAC scores among four types of HEIs [F (3, 24573) = 19.91, $p<0.001$]. According to the mean scores, "985" universities have the highest level of academic challenge to the students, followed by the local four-year and two-year colleges, while students in "211" university got the lowest score in the LAC. The post hoc comparisons using the Tamhane's T2 test indicated that the mean score of "985" universities was significantly higher than those of "211" universities ($p<0.001$), local four-year colleges ($p<0.001$) and local two-year colleges ($p<0.001$). The mean score of "211" universities was significantly lower than those of local four-year colleges ($p<0.001$) and local two-year colleges ($p<0.001$). No significant difference was found between local four-year and local two-year colleges.

Questions under this benchmark represent the amount of academic work assigned, the complexity of cognitive tasks required of the students, and the standards faculty members used to evaluate student performance, *etc*. Results on selected questions are detailed in Table 3. Results of the Chi-square test indicated that students' perception of the levels of academic challenges was related to the type of HEI. In general, students in "985" universities reported more coursework emphasizing cognitive development goals, more institutional policies encouraging that time and energies be spent in studying. Also in "985" universities, 24.3 percent of the students spent more than 26 hours *per* week in preparing for classes, which is much higher than students in the other three types of institutions. However, more students in local four-year and two-year colleges reported that they worked harder than they thought to meet teacher's expectation and standards.

Table 3. Percent reporting various dimensions of academic challenge (LAC items) by type of HEI

Items	"985" universities	"211" universities	Local four-year colleges	Local two-year colleges	χ^{2} [e]	*df*
Coursework emphasizes: Memorizing [a]	70.7	60.5	61.6	58.6	73.03***	9
Coursework emphasizes: Analyzing [a]	49.6	40.0	42.6	40.4	45.25***	9
Coursework emphasizes: Synthesizing [a]	48.3	41.6	44.4	47.4	49.05***	9
Coursework emphasizes: Applying [a]	69.3	52.6	56.8	64.5	204.43***	9
Worked harder to meet an instructor's expectations [a]	21.9	19.0	25.0	24.6	60.18***	9
Assigned more than 11 textbooks, books, or book-length packs of course readings [b]	34.2	28.2	29.4	29.8	47.84***	12
Spending significant amounts of time studying and on academic work [c]	79.0	68.9	71.5	74.8	157.79***	9
Spending more than 26 hours per week to prepare for class [d]	24.3	17.8	17.4	14.2	184.88***	21

Note: * $p<0.05$; ** $p<0.01$; *** $p<0.001$

a) Percentage of the respondents who answered "often" or "very often".
b) Percentage of the respondents who rated at least 4 on the 5-point scale.
c) Percentage of the respondents who answered "very much" or "quite a bit".
d) Percentage of the respondents who rated at least 7 on the 8-point scale.
e) Chi-square values were generated from the contingency tables which were based on students' answers of the given question.

Active and collaborative learning (ACL)

Table 4 shows that on the mean scores of ACL, a significant difference among the four types of HEIs [F (3, 24564) = 32.13, $p<0.001$] was found. Students from "985" universities scored the highest, sequentially followed by the local two-year and four-year colleges and "211" universities at the end. Post hoc comparisons using the Tamhane's T2 test showed that the mean score of "985" universities was significantly higher than those of "211" universities ($p<0.001$) and local four-year colleges ($p<0.001$). The mean score of local two-year colleges was significantly higher than those of "211" universities ($p<0.001$) and local four-year colleges ($p<0.001$). Students from "211" universities again scored the lowest.

It is assumed that students learn more when they are intensely involved in their education. Table 4 shows in detail how students engaged in their learning in different types of HEIs. Results of the Chi-square test showed that the percentage of students participating in specific learning activities was not independent from the type of institution. Students in "985" universities were more likely than students in other types of institutions to present in classes, work with classmates outside of classes, and discuss ideas with other people after class. In comparison, students in local two-year institutions were more likely than other students to work in groups on project during class.

Table 4. Percent reporting various dimensions of active and collaborative learning (ACL items) by type of HEI

Items	"985" universities	"211" universities	Local four-year colleges	Local two-year colleges	χ^2	*df*
Asked questions in class or contributed to class discussion [a)]	19.2	13.7	19.4	19.4	146.46***	9
Made a class presentation [a)]	22.1	9.7	9.7	9.5	246.92***	9
Worked with other students on project during class [a)]	57.0	54.6	61.1	68.8	258.21***	9
Worked with classmates outside of class to prepare assignments [a)]	59.5	48.5	52.8	52.8	66.36***	9
Discussed ideas from reading or classes with others outside of class [a)]	44.1	41.4	41.5	41.5	50.64***	9

Note: * $p<0.05$; ** $p<0.01$; *** $p<0.001$

a) Percentage of the respondents who answered "often" or "very often".

Student-faculty interaction (SFI)

Generally speaking, the interaction between students and faculty members is encouraged by all institutions. It is assumed that through various interactions, teachers become role models, mentors and guides for continuous and life-long learning to students. However, compared with the other benchmarks, mean scores for student-faculty interaction were relatively low in all types of institutions, which indicated that Chinese college students engaged less in contact with faculty members than they did in other learning activities. There was a significant difference on the SFI scores among the four types of HEIs [F (3, 24543) = 25.93, $p<0.001$]. Judging by the mean scores, students in "985" universities interacted with faculty members the most often, followed by the local four-year and two-year colleges and the "211" universities. Post hoc analysis using the Tamhane's T2 test indicated that the mean score of "211" universities was significantly lower than those of "985" universities ($p<0.001$), local four-year colleges ($p<0.001$) and local two-year colleges ($p<0.001$). Specifically, students in "985" universities seemed more likely to have opportunities working on a research project with faculty members outside course work. Nineteen percent of the undergraduate in "985" universities reported that they have participated in research projects, comparing with 11.3 percent in "211" universities, 9.2 percent in local four-year colleges, and 8.6 percent in local two-year colleges.

Enriching educational experiences (EEE)

On the EEE benchmark, Table 5 shows a significant difference on mean scores of the four types of HEIs [F (3, 24548) =106.20, $p<0.001$]. Undergraduates in the local two-year colleges have the most enriching educational experiences, followed by "985" universities, "211" universities, and the local four-year colleges in sequence. Post hoc analysis using the Tamhane's T2 test showed that the mean score of the local four-year colleges was significantly lower than those of "985" universities ($p<0.001$), "211" universities ($p<0.001$) and the local two-year colleges ($p<0.001$). The mean score for "211" universities was significantly lower than the local two-year colleges ($p<0.001$). However, no

significant difference was found between "985" and "211" universities, as well as between "985" universities and the local two-year colleges.

The benchmark of EEE covers many learning activities outside the classroom which are not required by teachers, but initiated by students themselves. When looking more closely at individual items under this benchmark, student engagement in each type of institution presents its distinct pattern. Results of the Chi-square tests in Table 5 show that the percentage of students who have done the selected enriching experiences was not equally distributed in different types of HEIs. Students in "985" universities were more likely than students in other types of institution to have opportunities to study abroad, participate in academic competition, take a minor or secondary programs, and learn foreign language outside course requirement. In comparison, students in "211" universities were more likely than other students to participate in community services or volunteer work and participate in learning groups after class. Students in the local two-year colleges were more likely than others to take professional certificate examinations and do practicum, internship, field experience, *etc*. It may be assumed that students from different types of institutions have different expectations of their futures and their learning motivations also differ. It may also be the case that different institutions provide learning resources compatible with their distinct missions and goals. We will explore these interpretations in the later part of this paper.

Table 5. Percent reporting various dimensions of enriching educational experiences (EEE items) by type of HEI

	"985" universities	"211" universities	Local four-year colleges	Local two-year colleges	χ^{2} b)	*df*
Practicum, internship, field experience, and *etc*. a)	41.6	47.4	37.9	52.6	451.97***	3
Community service or volunteer work a)	39.4	51.4	31.2	48.3	747.16***	3
Participate in learning groups or clubs a)	56.5	63.3	57.6	55.7	33.99***	3
Foreign language learning outside of course or program requirements a)	25.4	18.6	15.6	10.4	227.15***	3
Study abroad a)	4.8	1.7	1.6	1.3	64.97***	3
Participate in an academic competition a)	17.8	13.8	14.1	15.8	19.13***	3
Take professional certificate examination a)	29.4	32.8	34.7	37.1	31.52***	3
Take a minor or secondary program a)	12.9	8.1	5.9	7.0	76.98***	3

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

a) Percentage of the respondents who answered "done".

b) Chi-square values were generated from the contingency tables which were based on students' answers of the given question.

Supportive campus environment (SCE)

As for the benchmark of SCE, Table 6 shows there was a significant difference among the four types of HEIs [F (3, 24552) = 8.88, p<0.001]. Examining the mean scores, "985" universities were the

most supportive of their students' learning followed by the local two-year and four-year colleges and the "211" universities in sequence. Post hoc comparisons using the Tamhane's T2 test indicated that the mean score for "211" universities was significantly lower than those of "985" universities (p<0.001), local four-year colleges (p<0.001) and local two-year colleges (p<0.001). No significant difference was found among "985" universities, local four-year and two-year colleges.

Table 6 shows how students from the four types of institutions responded to the individual items of the SCE. Results of the Chi-square test indicated that students' perception of institutional supports was related to HEI type. Students from "985" universities and the local two-year colleges reported more academic supports and support helping them better integrate with college life. Meanwhile, students from "985" and "211" universities reported more economic supports from the institutions than their counterparts in the local four-year and two-year colleges. The result may partly relate to the *Key Construction Projects* wherein the government put more resources in a smaller number of selected HEIs, such as the "985" and "211" institutions. Student from the local two-year colleges reported more supports from the institutions in helping them thrive socially and become more employable, which accords with the institutions' career-oriented mission.

Table 6. Percent reporting various dimensions of a supportive campus environment (SCE items) by type of HEI

	"985" universities	"211" universities	Local four-year colleges	Local two-year colleges	χ^{2} b)	*df*
Campus provides the support you need to help you succeed academically a)	76.8	66.9	68.1	75.7	248.50***	9
Campus provides the support and guidance you need to obtain employment a)	60.8	68.0	68.8	82.3	865.74***	9
Campus provides the support you need to thrive socially a)	46.6	43.0	46.6	54.0	177.96***	9
Campus provides various events and activities to make you better integrated with the college life a)	70.3	67.7	68.8	72.2	94.14***	9
The institution helps you cope with economic problems to complete the program a)	65.7	64.1	60.0	52.0	275.88***	9

Note: * p<0.05; ** p<0.01; *** p<0.001

a) Percentage of the respondents who answered "very much" and "quite a bit".

b) Chi-square values were generated from the contingency tables which were based on students' answers of the given question.

Why students engaged in learning differently

The above mentioned results demonstrate that student engagement in educational practices differs in different types of HEIs in China. While many factors may influence student engagement, this paper will focus on student's motivation, expectation, and the satisfaction with college life which affects their learning behaviors and outcomes.

Motivation for learning

It has been accepted that the extent of an individual's motivation to learn can affect one's educational behavior and achievement (Dweck, 2002; Ausubel, 1978; Middleton & Spanias, 1999; Weiner, 1990; French, 1958; Rosen & d'Andrade, 1959; Charles, Stephen & Dennis, 2006; Martin, 2000). A one-way ANOVA was conducted to compare the differences on scores on learning motivation of students in different types of HEI.

Table 7 shows that there were significant differences in motivation for learning among students in the four types of HEIs [F (3, 24403) = 26.7, p=0.001]. Post hoc comparisons using the Tamhane's T2 test indicated that the mean score for the local four-year colleges was significantly higher than "211" universities (p<0.001) and the local two-year colleges (p<0.001). In short, students in the local four-year colleges have the strongest motivation (Table 7).

The sources of motivation are also important or even more important for investigation, because different sources of motivation not only influence students' learning attitudes and behaviors, but also lead to various patterns of learning engagement. The results of one-way ANOVA showed in Table 8 that there was a significant difference in the source of motivation among students in the four types of HEIs.

Table 7. Mean extent of learning motivation by type of HEI

	"985" universities		"211" universities		Local four-year colleges		Local two-year colleges		*F*
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Learning Motivation	60.3	23.4	59.0	23.1	61.4	23.4	58.5	22.9	26.7***

Table 8. Percent reporting various sources of learning motivation by type of HEI

Items	"985" universities	"211" universities	Local four-year colleges	Local two-year colleges
The interest of pursuing knowledge [a)]	69.1	62.8	66.5	71.6
Hunting for a job [a)]	61.8	76.2	79.9	88.1
Study further [a)]	61.9	62.8	65.1	66.9
To achieve parents' expectations [a)]	74.0	78.9	84.1	87.7
The influence of school and peers [a)]	65.0	58.3	56.6	61.3
To challenge or improve self [a)]	75.6	72.9	74.4	75.1
The responsibility to country and society [a)]	48.0	40.0	44.5	43.5

a) "very much" and "quite a bit"

For the students from "985" universities, the primary motivation was to challenge or improve the self, followed by achieving parents' expectations. Compared to the students from other HEIs, students from "985" universities were more influenced by the institutional environment and the peers they study with. This may help to explain why students in "985" universities have higher scores on ACL and SCE.

For students from "211" universities and the local four-year colleges, achieving parents'

expectations was the number one choice, followed by job hunting.

In contrast to the "211" universities and the local four-year colleges, students in the local two-year colleges were motivated firstly by hunting for a job, then by achieving parents' expectations. This is consistent with the institutions' career-oriented mission, and can partly explain why students in the local two-year colleges have the highest frequency in practicum, internship and taking professional certificate examination. The data from qualitative interviews with students in the local two-year colleges indicated that getting a job was perceived by many parents as the most desirable outcome, especially for those who are from rural areas. The findings from both quantitative and qualitative studies illustrate the salient role of the interaction of institutions with families which jointly influence students learning behaviors.

Academic expectation

While differences in student engagement among various types of HEIs can be explained partly by institutional policies and pedagogies, it is also worth noting role of various background factors, such as diverse family origins, prior academic experiences, and the various expectations that students bring to the college. We have investigated students' expectations for the future, which in reflected in the questionnaire as "what do you plan to do after graduation". Answers to that question reflect students' learning goals, which may affect students' learning engagement and educational achievement.

A Chi-square test was performed to examine the relation between types of HEIs and the students' expectations (see Table 9). Preference for the five expectations examined was not equally distributed among the four types of HEIs [$\chi^2 = 2493.29$, $df = 12$, $p<0.001$]. There were more students in "985" universities planning to study abroad for a higher degree or pursue a doctoral degree in China. This may be the reason why students in "985" universities reported a higher level of academic challenge and more participation in extra foreign language learning. Students from "211" universities and the local four-year colleges were most likely to pursue a Master's degree in China. Students from the local two-year colleges have the lowest academic expectations, *i.e.*, more than a half of the students studied simply aspire to graduate from their current institution.

Table 9. Differences in academic expectation by the type of HEI

Items	"985" universities	"211" universities	Local four-year colleges	Local two-year colleges
Studying abroad to get a higher degree	25.0	13.5	8.2	4.6
Pursuing a doctor degree in China	7.4	6.1	5.3	4.1
Pursuing a master degree in China	36.9	44.8	41.0	16.7
Just for graduation	22.0	27.1	35.5	54.5
Never considered this issue	8.8	8.5	9.9	20.1

Previous studies show that the formation of expectations is influenced not only by one's own experience, but also rooted in the cultural context (Middleton *et al*., 1999). Moreover, expectation is

considered a personal characteristic that is "open to influence" (Pintrich & Schunk, 2002). Since there is a big regional gap, both in geography and administration in China, student's expectations are also influenced by the locations of their families. The results of the Chi-square test indicated significant differences in the distribution of students' family location among the four types of HEIs: "985" universities, $\chi^2 = 60.86$, $df = 4$, $p<0.001$; "211" universities, $\chi^2 = 35.65$, $df = 4$, $p<0.001$; local four-year colleges, $\chi^2 = 155.08$, $df = 4$, $p<0.001$; local two-year colleges, $\chi^2 = 64.60$, $df = 4$, $p<0.001$ (see Table 10).

Table 10. Percent reporting various academic expectation by student's family location

Items	"985" universities		"211" universities		Local four-year colleges		Local two-year colleges	
	Urban area [a)]	Rural area [b)]	Urban area [a)]	Rural area [b)]	Urban area [a)]	Rural area [b)]	Urban area [a)]	Rural area [b)]
Studying abroad to get a higher degree	36.0	13.6	20.4	10.1	12.4	6.4	8.0	3.5
Studying in China for a doctor degree	6.9	8.0	4.6	7.0	4.4	5.7	4.2	4.1
Studying in China for a master degree	29.3	44.6	42.1	46.3	37.7	42.5	16.3	16.7
Just for graduation	19.2	24.6	24.4	28.3	34.8	35.8	53.1	55.4
Never considered this issue	8.5	9.2	8.6	8.4	10.7	9.5	18.4	20.2

a) Urban area includes metropolis, provincial capital and prefecture.
b) Rural area includes county, suburb of the county and village.

The results showed that family location has a significant impact on students' expectations, even for those who have made already decided to pursue a higher degree after undergraduate study. In all types of HEIs, students from urban areas are more likely to pursue a higher degree abroad, while those from rural areas are more likely to do so in a domestic university. In "985"universities, the highest percentage of students from urban areas chose studying abroad (36.0%), while the highest percentage of students from rural areas chose to get a Master's degree in China (44.6%). In "211" universities and the local four-year colleges, more students plan to pursue Master's degrees in China , with no significant difference by family location. Students in the local two-year colleges, whether from urban or rural areas, reported that they aspire simply to graduate from their current institution.

Learning outcomes

For student learning outcomes, we measured both students' overall satisfaction with the institution and their self-reported gains from the college experience. A one-way ANOVA was conducted to compare the differences among the four types of institutions.

The results (Table 11) indicate that there was a significant difference in the student satisfaction scores among different types of HEIs [F (3, 24497) =163.89, $p<0.001$]. Post hoc comparisons using the Tamhane's T2 test showed that the mean score for "985" universities was significantly different

from "211" universities (p<0.001), the local four-year colleges (p<0.001), and the local two-year colleges (p<0.001). Moreover, a significant difference was found between "211" universities and the local four-year colleges (p<0.01) and two-year colleges (p<0.01), and also between the local four-year and local two-year colleges (p<0.001). Students at the "985" universities have the highest level of satisfaction, followed by the local two-year colleges, the "211" universities, and the local four-year colleges.

We also examined the students' self-reported gains across the four types of HEIs. Significant differences were found [F (3, 24545) =13.58, p<0.001]. Post hoc comparisons using the Tamhane's T2 test indicated that the mean score for the "985" universities was significantly higher than that of the "211" universities (p<0.001), the local four-year colleges (p<0.001) and the local two-year colleges (p<0.001). The mean score for the "211" universities was the lowest. No significant difference existed between the local four-year and two-year colleges.

Table 11. Mean scores on learning outcomes by type of HEI

	"985" universities		"211" universities		Local four-year colleges		Local two-year colleges		F
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Overall Satisfaction	65.0	23.3	54.8	21.2	52.9	22.1	58.4	22.3	163.89***
Self-reported Gains	61.0	17.7	56.3	17.1	58.1	17.5	58.1	18.7	13.58***

Note: * p<0.05; ** p<0.01; *** p<0.001
Limited by the paper length, the results of post hoc analyses were not report. However, Tamhane's T2 test was taken for post hoc analysis, if the equal variance assumption was not accepted in Levene's test of homogeneity of variance (p<0.05). Otherwise, LSD test was used.

Discussion

Generally speaking, student's enragement in their collegiate learning is a function not only of individual factors, but also closely related to the environment in which students have grown up and in which they are pursuing their college education. While a large number of studies have shown that certain institutional practices are linked with high or low levels of student engagement, this paper seeks explicitly to offer insight into the connections between institutional types and student's engagement in China, at a moment when HE is undergoing a dramatic transition from a highly centralized, homogeneous system to a diverse, stratified one.

The analysis based on the data provided by the NSSE-China 2010 survey suggested that type of institution has salient effects on college students' engagement in effective educational practices. Specifically, "985" universities representing the highest tier and the local two-year colleges representing the lowest tier in the system performed better than "211" universities and the local four-year colleges in promoting student's engagement. The finding should not be surprising, since the two middle tier institutions have absorbed the major share of student enrollment expansion. Similar

results have been found by other researchers. For example, Bao (2010) evaluated the quality of teaching and learning in HEIs in Beijing by using the data from the Beijing College Student Development Survey. Her finding was that "985" universities had superior competitive advantages in the systematization of curriculum and student service, while the local two-year colleges showed obvious advantages in the practicality of their programs and courses. In contrast, the core-competitiveness of undergraduate education in the local four-year colleges was relatively vague. The "211" universities, though receiving special support from the government, were struggling with striking a balance between undergraduate education and fast growing post-graduate programs.

The changing social environment and HE reform in China within recent decades have posed various challenges to HEIs. Under the pressure of marketization and quality demands, all HEIs have paid more attention to students' learning outcomes, resulting at least partly from the teaching/learning process which is closely related to the missions of the institutions. Although HEIs have been trying to establish explicit institutional-wide learning goals to define their work, to set up standards and criterion in knowledge, skills and abilities for their undergraduates to meet, and to construct an intellectual framework for building a common curricular and co-curricular learning experience, they were not always successful in their design processes and implementation has been even more difficult. Factors beyond their control from both inside and outside may influence the process which compromises their efforts and leads to confusion in student's perceptions and ultimately, then to student behaviors. Moreover, neither students, nor institutions come with the same interests and concerns – their expectations for the future differ. How to stimulate institutions and to energize students working together in educationally purposeful activities within a limited time span seems a big challenge for Chinese HEIs. The analysis of the students' learning engagement should move beyond the visible behaviors, and extend to the dimension of motivations, expectations and satisfactions which may be invisible, but highly influential on student's behaviors.

The "985" universities clearly regard cultivation of top innovative talents as their main mission. With this academic orientation, curriculum and teaching/learning designs in "985" universities are more focused on students' academic development. Students in "985" universities are highly selected and regarded as the most successful and promising elites by themselves and the whole society. For years, people in China, including students and their parents, have believed that entrance into the top universities shapes one's future success and social status and that the higher the degrees hey obtain, the brighter the future they will have. As a result, students in "985" universities usually have higher academic expectations and engage more in academic and research-oriented activities. Particularly, being the top-tier HEIs in China, "985" universities obtain more government funds and recourses which turn into the superior hardware and favorable conditions for students to be involved in various activities which lead to a higher degree of students' behaviors on SCE.

As for "211" universities, the situation is somewhat different. Although recognized as the second-tier universities, they get less financial support from the central government, but larger

possible opportunities for future development. The supplementary financial supports from provincial governments and high expectations from both local and nation-wide markets inspire their expansion. Quite a number of "211" universities have worked out ambitious strategies to enlarge the undergraduate student body, as well as post-graduate education and the possibility of becoming research-oriented, comprehensive universities makes their working sphere even larger. There is no doubt that the limited resources cannot support the expansion and undergraduate education is not in a favorable position in the internal resource allocation process. The low scores of students in "211" universities in the major benchmarks and other aspects of the survey caused some alarm and several of our project institutions have already taken actions to improve undergraduate education. The positive feature shown in the study of "211" universities in undergraduate education is that the diverse demands of students, unsettled goals of the university and multiple paths forward create a dynamic for the future. Undergraduate students at "211" universities report the highest likelihood of pursuing Master's degrees. The phenomenon not only reflects the traditional credentialism, but also the possible chance for the students in these institutions to increase their capital in the job market. The "211" universities and the local four-year colleges have become backbones in the system of training Master's degree students, while the "985" universities play a major role in training doctoral degree students.

Local four-year colleges face problems similar to the "211" universities. They are also supported by the provincial or local governments, the number of students has also increased greatly while the resources *per* student are limited, even declining. So in our research, local four-year colleges perform similarly to the "211" universities.

In China, local two-year colleges are mainly vocational or technical post-secondary institutions. Differing from the other three types of HEIs, local two-year colleges are officially committed to cultivate applied and technical personnel as their goal and to contribute to local economic and social development, but in many people's eyes, students in the two-year colleges are viewed as academic failures with low scores on the National College Entrance Exam. It is believed that most of the students in these institutions have no expectations for further study or research, show little interest in academic activities and take graduation as the final academic destination. Traditionally higher education was considered as a ladder to reach the same goal and expectations, while in a more stratified system, different HEIs worked at different rungs of the ladder. But the HE system in the 21st century is faced with diverse requirements and has to meet the various needs not in a non-linear structure. Therefore the local two-year colleges are not just the short form or lower level of the four-year college, but assume different roles and functions. It seems that students and staff in local two-year colleges are more fully aware of their purpose and what they should engage in during the college experience. The survey findings show that students in the local two-year colleges spend more time on practice, internship, professional certificate exams which directly enhance their capacities in job hunting and fitness in the labor market. Just like the students in "985" universities who want to

pursue further study abroad and the students at the "211" universities planning to study for a Master's degree, students in the local two-year colleges have their own expectations for the future and are clear enough about how to achieve their goals through college study.

Limitation

Previous research has shown that institutional policies and practices have significant impact on students' engagement. The present study uses data from China to corroborate (reaffirm) that point and extend it by investigating the motivations which may shape student engagement. Student's learning behaviors and their underlying motivations in four types of HEI are specially studied. However, variables other than the institutional types that are not included could also be significant in influencing students' motivations and engagement. Many other reasons such as the culture of the region in which an institution is located, students' pre-college experience and their individual characteristics, the features of the programs and disciplinary fields they are studying, could all influence student motivation and moderate the relationship between the institution's educational practices and student engagement.

In terms of methodology, although self-reported information is relevant for measuring aspects of the college experience, such as motivation, expectation and satisfactions, that cannot be easily accessed through other means, more optimal methods, such as personal interviews and focus group discussions should also be included in future studies.

Conclusion

The paper does not answer the prototypical "cause-effect" question: do students with similar expectations enroll at the same types of institutions or do the same or similar institutional policies and educational practices contribute to the similarity in students' learning behaviors and outcomes. What the paper does is to raise the question of "how" and "why", and to how student motivation and expectations matter to the student engagement and learning outcomes.

It is true that "without knowing how students spend their time, it's almost impossible to link the student learning outcomes to the educational activities and processes associated with them". (Kuh, 2001) It is also true that without knowing why students spend their time and energy in certain activities, it is almost impossible to improve student learning outcomes through reforming institutional education practices. This is what the paper tries to say.

The paper explored what student engagement really means for Chinese undergraduate students in different types of institutions and what stimulates students to be engaged in certain educationally purposeful activities – the influential factors to lead or push student's engagement. The findings generally corroborate previous research in the area and raise some issues for further study.

Generally speaking, students in different types of institutions have different motivations and academic expectations which may be influenced by peer groups, teachers and institutional pedagogies, but also possibly by the broader context including the higher education system and inherited social and culture values. It should be recognized that the concept of "student engagement" is culturally constructed. It is reflected in student's behaviors, but rooted in social understandings of "good" or "bad" students. Student motivation is a key component in student engagement, which is not always based on individual choice, but driven by social expectation and utilitarianism. In a time of massification, marketization and globalization of higher education, the NSSE-China survey and related studies provide us a window into the interaction of undergraduate students with HEIs and society as a whole in China's social transition.

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Horizontal and Vertical Differentiation in the Global Market for Higher Education: An economic perspective

Yukari Matsuzuka*

Abstract. There have been simultaneous calls for quality assurance and internationalization in the global higher education community. This means that the quality of higher education is evaluated based on globally shared criteria. As students move cross-nationally for higher quality in education, the quality distribution becomes wider, which suggests greater disparity in demand for university education. The value reallocation of universities through functional differentiation, rather than quality differentiation, can be a means to alleviate this disparity. This is more likely in smaller markets where a single or a smaller number of functional segments satisfies the need in the market. In larger markets, particularly through cross-national networking among universities, functional differentiation potentially brings about greater disparity in demand for university education.

Keywords: functional differentiation, human capital hypothesis, globalization, quality assurance, returns to education, self-selection

Introduction

In the global higher education community, internationalization and quality assurance have been major trends and imperatives for universities over the past decade. Altbach and Knight (2007) suggest that the internationalization of universities includes the policies and practices undertaken by academic systems, institutions and even individuals to cope with the global academic environment. Activities for internationalization range from traditional study-abroad programs by which students learn about other cultures and languages for a relatively short term, to access to longer term degree programs in countries where local institutions cannot meet the demand (Altbach & Knight, p.290). The increase in the mobility of students has in fact been significant over the past decade. Between 2000 and 2009, the number of foreign students enrolled in tertiary education in OECD countries increased by 80 percent, from 1,588,862 to 2,838,027 (OECD, 2011, p.333, Table C3.1; OECD, 2007, p.317, Table

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C3.1).

Another imperative, quality assurance, is defined as "policies, attitudes, actions and procedures necessary to ensure that the quality of education and scholarship is being maintained and enhanced. Effective quality assurance in the academy requires the use of external points of reference, both national and international" (Bogue, 2002, p.3). Indeed, university quality has been increasingly assessed by using external points of reference to ensure accountability to society. Such points of reference are formalized in most OECD countries by authorized agencies like the Quality Assurance Agency for Higher Education (QAA) in UK, the Council for Higher Education Accreditation (CHEA) in the U.S., and the Australian Universities Quality Agency (AUQA) in Australia.

A recent trend in quality assurance is that such reference points have been increasingly shared across nations, and university education as well as scholarship has thus become evaluated within a common or similar framework even in different countries (Bernhard, 2012). There are national qualification frameworks for each country, but overarching systems that cover wider regional areas have been identified for the assessment of universities. An example is the European Association for Quality Assurance in Higher Education (ENQA), which intends to cover the higher education systems and practices of all the Bologna signatory countries in Europe.[1] University ranking is another influential source of information that has been used across the board, especially by students and their parents, to choose the universities that they would like to attend.[2] Cross-border sharing of quality information helps students and their families select institutions from a global perspective, thus accelerating and broadening their mobility. An increase in global mobility then further facilitates the use of globally shared criteria. Hence, the sharing of quality standards and the increase in mobility reinforce each other.

Most universities in the world have been coping with these new trends in the context of shrinking budgets. They have to ensure their quality and improve their competitiveness in the global market with declining sources of funding (Johnstone & Marcucci, 2010). One strategy for adapting to this trend is to concentrate resources on their core areas, by differentiating themselves from other players in the market. Indeed, the Japanese government has been encouraging universities in Japan to work toward "functional differentiation."[3] The rationale appears to be that universities will perform better by focusing their resources efforts on their core competencies, while collaborating with other institutions in areas that are not their core strength, but may be for their competitors. The interest of

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[1] Concerning the Bologna Process, see http://www.ond.vlaanderen.be/hogeronderwijs/bologna/
See more about ENQA at: http://www.enqa.eu/

[2] Well-known players in this area include Times Higher Education (THE) World University Rankings, and Quacquarelli Symonds (QS) World University Rankings.

[3] A grand design for higher education between 2005 and 2020, reported by the Central Council for Education, included the "Facilitation of Functional Differentiation of Universities and Establishment of Networks among Universities." See the brief English summary at
http://www.mext.go.jp/english/highered/__icsFiles/afieldfile/2012/06/19/1302653_1.pdf.
For more details in Japanese, see the special report by Japan Student Services Organization (2005).

a national government is to guide universities to utilize resources efficiently and still enhance the academic capacity of each university. Universities may lose self-sufficiency in meeting the full panoply of academic needs (MEXT, 2011). But, even if a single university fulfills only one or a few of the functions from among the comprehensive roles of a university, insofar as different areas are covered by different universities, the academic needs of the community could be collectively satisfied as a whole.

Thus, functional differentiation potentially empowers universities, while still enabling them to co-exist with other institutions particularly with different areas of strength. This rationale is explained by the law of "comparative advantage" in economics, which refers to the ability of an entity to produce a particular good or service at a lower marginal cost. If two different players in the market have their own comparative advantage, and if they have different relative efficiencies, both players will gain by trading with each other (Dornbusch, Fischer, & Samuelson, 1977; Ricardo, 1817). In other words, by specializing in a good or service where players have a comparative advantage, each of the players can survive. As there could be no difference in the rate of profit for both players, the price of the good or service could remain constant.

Nevertheless, this Ricardian approach for comparative advantage was formulated for two players and two commodities in a market with capital being immobile. When players number more than three dealing with more than three commodities, the formulation loses its ground. In the global economy, as factors of production are internationally mobile and as cross-border trade has become increasingly complicated, it has been argued that trading is more likely to follow the rule of "competitive advantage" rather than comparative advantage, governed by absolute value in the free market (Porter, 1985). The competitive advantage hypothesis suggests that business will have an incentive to develop higher quality goods or services to sell them at higher prices in the market, which implies that difference in prices will become greater.

The recent trend of liberalization and the hike of prices in the higher education market (Johnston & Marcucci, 2010) suggest that the rule of competitive advantage might have become more robust for universities along with their globalization. This paper elaborates on the concept of functional differentiation, which could be both a means of co-existence for universities, and a strategy to compete in the market. I consult basic economic theories, including the human capital hypothesis and self-selection model, to examine different types or roles of functional differentiation that could operate differently depending on the size of markets.

Theory

The Mobility assumption

A key assumption for functional differentiation in higher education is that universities can perform better in both research and education by differentiating themselves from other universities. The

result of the improved performance would be an increase in overall demand for education, which will be reflected in an increasing number of students who want to study at the universities. Using demand for education as an outcome indicator for functional differentiation, the basic assumption is that individuals can choose institutions at which they would like to study, based on information they are given about the utility that they would be able to gain by attending the institution.[4] And it is also assumed that students are free to move to the institutions that they chose although they might be constrained in terms of the cost of moving and of their academic ability as reflected in the credentials presented for admission. These assumptions follow the self-selection hypothesis (Roy, 1951; Willis & Rosen, 1978) and the human capital hypothesis (Becker, 1993; Dahl, 2002). In simplified terms, the conceptual assumption can be shown as:

$$\prod_i^t I = a_i^{t+1}[\text{Education}_i^{t+1}], b_i^{t-1}[\text{Cost}_i^{t-1}], c_i^{t-1}[\text{Ability}_i^{t-1}]$$

The likelihood of attending postsecondary institution *I* for individual *i* at time *t* will be determined by the expected return to education at institution *I*, which will be evaluated by the expected income and employment associated with attendance at and graduation from institution *I*. Also, the quality of institution *I* will be counted for a shorter-term indicator. The second parameter indicates the effect of the cost of education at institution *I*. This consists of the mobility cost (such as cost of travel between a student's original location and the receiving institution, and the living cost in the receiving country). Also, the ability of individual *i* affects the decision to attend institution *I*, particularly when institution *I* has strict admission criteria. *a, b,* and *c* show the coefficients of the respective parameters.

The first parameter, returns to education, is determined by the type and quality of education, and thus signifies the attributes of an institution. The second and third parameters, the functions of cost and ability, are determined by the capacity of students and their families. The affordability of mobility costs for instance would be affected by the wealth of students and their parents. The cost can be paid by a third party including through governmental funding for studying abroad, or funding from the receiving institution or country. But such an arrangement is more or less determined by the attributes of the student, like their academic ability or their socio-economic background. Ability is also a student's attribute, particularly prior to the decision to go to a particular postsecondary institution. Since this study aims to discuss the functional differentiation by "institutions," holding cost and ability constant, we will focus on the function of universities that yields returns to education.

I will discuss in the following the relationship between functional differentiation and returns to education, and how this relationship will affect the mobility of students.

[4] By "utility," we assume the benefit of attending or graduating from the university, including additional earnings, better employment, and better quality of life in the future.

Functional differentiation

Two types of differentiation

Universities expect to improve their performance by differentiating their functions from those of other institutions in the same market. The performance gain will include a greater number of students, higher quality of education and research, and higher institutional revenue. This kind of "differentiation" has been a common strategy over the decades in the business community. Corporations try to differentiate their products and/or services from those of others in order to gain comparative or competitive power in the market. Through the decades of their experiences, it is noteworthy that at least two types of differentiation have been identified, namely, "vertical differentiation" and "horizontal differentiation" (Beath & Katsoulacos, 1991; Greenaway, Hine, & Milner, 1995). Vertical differentiation means to differentiate goods by quality, and horizontal differentiation, by the functions of the goods.

1) Vertical differentiation

In the case of vertical differentiation, different prices are assigned to different levels of quality. Thus, the richer are more likely to consume higher quality, while the poorer, lower quality. Vertical segmentation of consumers thus occurs accordingly. In the case of horizontal differentiation, not the quality, but the role or the function of the goods or services is differentiated. If the amount of demand is identical for each different function, and holding other price influencers such as production costs constant, there is no disparity in marginal prices between these different products.

This logic can be applied to the differentiation of universities. Vanhaecht and Pauwels (2005), for instance, assume two different types of universities: ones that focus on vertical (quality/reputational) differentiation, and others that focus on horizontal (functional) differentiation. They found that where vertical differentiation dominates, universities compete based on higher quality and admission standards. Then, mobility possibly increases institutional and/or regional disparity in the ability of students. Figure 1 depicts this case. The vertical line indicates returns to education, which reflect the quality of an institution. The horizontal line indicates the ability of the individuals. The upward slope shows that higher-ability individuals will attain higher returns to education, and institutions with higher returns to education attract abler individuals. A steeper slope means that the marginal return to education is larger.

Assume that an individual is indifferent about whether they go to institution A or institution B. The return to education is determined by institutional quality, which usually reflects the difficulty of gaining admission. With all other determinants of mobility being constant, those with higher ability will go to institution A. If the institution takes individuals whose ability is higher than Q_p, the gain by the abler is then shown as space C_p, Q_p, Q_1, C_1, which is greater than when they go to institution B, shown as space C_p, Q_p, Q_1, D_1. For lower-ability individuals, going to institution B is better. For

instance, an individual with Q_0 ability will have the space surrounded by α_2, α_0, Q_0, C_0, instead of α_1, α_0, Q_0, D_0, which is when the slope is steeper.

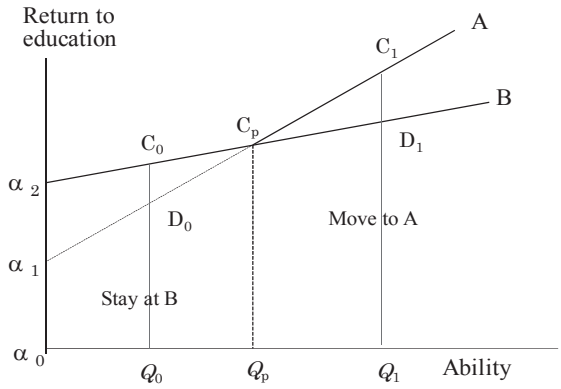

Figure 1. Mobility by vertical differentiation

This examination is based on the assumption that institutions A and B are evaluated based on common quality criteria. When there are more players in the market with different slopes, disparity of ability among individuals becomes greater, which would also be reflected in the reputation of institutions. Thus, the disparities in quality between institutions tend to widen. Indeed, the issue in vertical differentiation is extended to second-stage effects. Consider that higher-quality education can be priced higher. If those with higher income tend to consume highly priced education, and such education yields higher returns to education, the disparity between those who consume higher-quality education and those who consume lower-quality education will grow even larger.

2) Horizontal differentiation

Where horizontal differentiation dominates, different universities offer different functions but equivalent quality levels. This is the case where institutions focus on their own strengths, but do not violate the market for other functions, thus following the rule of comparative advantage. If there is identical demand for different functions provided by different institutions, the same value, *i.e.*, returns to education, are realized for each function. Then, asymmetric equilibrium between institutions can be attained and both institutions survive in the market. The quality of universities with different functions would be evaluated based on different criteria, and students who are admitted to those institutions would also be evaluated by using different criteria.

Thus, in Figure 1, if all institutions have different functions, there is only one line. If the resources for respective functions of education are allocated equivalently by precise examination of market demand for each function, there will be no disparity between institutions. Nonetheless, we have to remember that the aims of functional differentiation include increasing the quality of each

function, where such function is of competitive advantage for the institution, and where the institution concentrates its resources on that function. The intention, then, is to make the slope steeper. Thus, within the institution, there will be greater disparity among individuals.

Space issue: Different implications of functional differentiation in the global market

The horizontal differentiation discussed above can be explained in greater detail in Figure 2. Institutions A, B, and C have different strengths, say engineering, medicine, or business.[5] Assuming that demand for these respective educations is equivalently distributed, equilibrium to sustain all institutions can be attained. Meanwhile, minor areas of education, say engineering education for students with a business or medicine major, business inputs for those with an engineering or medicine major, or medical inputs for those with a business or engineering major, could be taught in a partner university. So institutions share their resources with other institutions by outsourcing minor areas to each other. This is why functional differentiation is discussed in terms of cost effectiveness. But a greater benefit expected is that students can receive better-quality education in their minor areas at partner institutions where those areas are the strength of the institution.

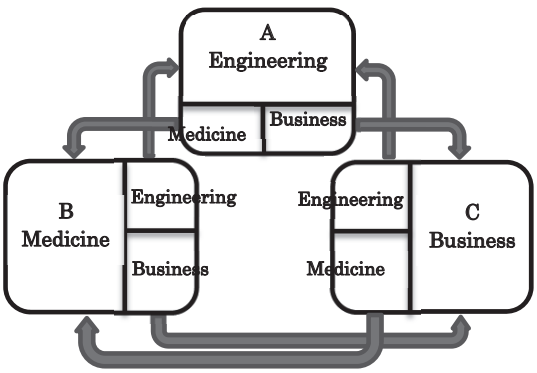

Figure 2. Functional differentiation with single player in each function

Functional or horizontal differentiation thus, on the one hand helps strengthen the competitiveness of an institution; on the other it allows different institutions to co-exist. Nonetheless, this is not true when the number of players in each function increases beyond one. When two players

[5] Functions could reflect both academic areas and institutional characteristics. For this study, the example of academic areas is used since the categorization can be used internationally. Categorization by institutional characteristics include those by the Central Education Council, which set up seven functions for universities: 1) global center of research and education; 2) development of highly skilled professionals; 3) development of wide-skilled professionals; 4) comprehensive liberal arts education; 5) education and research in specific areas of specialization (such as arts and sports); 6) center for regional life-long education; and 7) social contribution including regional contribution and industry, academic, and public collaboration.

exist in each function, the "quality" in the same function will be taken into account when students select institutions to attend. Then, the quality is vertically distributed among institutions and disparity in quality will be an issue.

A new trend in recent years is that functional differentiation has been occurring through global networking. In the global market, functional differentiation could still be a means to gain competitive power. In order to strengthen their existing competitiveness, universities, as it happens, engage in networking with those that have the same functions, like engineering schools in Japan having alliances with engineering schools in Germany, MBA programs partnering with business schools in France, and so on. Such alliances potentially offer the highest level of academic quality in the world, by focusing on limited functional areas with a greater amount of area-specific skills spread out in the global market. Meanwhile, subject areas that are not a university's core strengths could, again, be taught in another university in the region where such subjects are their focus.

Figure 3 shows functional differentiation through global alliance. An institution in 'Country a' that has function A develops a network with an institution in 'Country b' that has the same function. Functions B and C are then outsourced to other institutions.

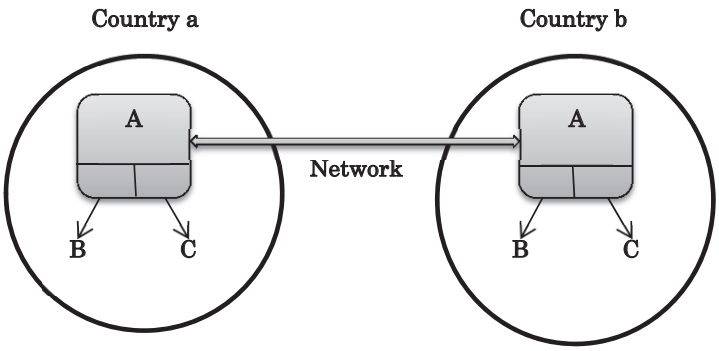

Figure 3. Functional differentiation through global alliance

In the international market, there are more players. Thus, as shown in Figure 4, there will be A and A' that develop alliances with B or B' in other countries. Then, between A and A', and between B and B', respectively, vertical competition will occur. The greater the number of institutions with the same function, the larger the disparity in quality among different institutions. This is vertical differentiation within the framework of horizontal differentiation. This can be more serious in the global market where there is a larger number of players in the same field.

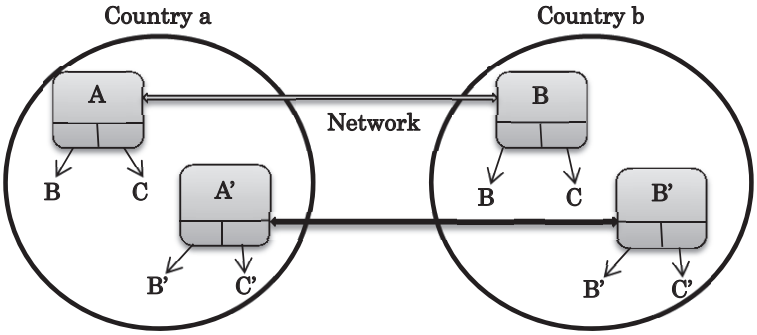

Figure 4. Functional differentiation through global alliance with more than one player in the domestic market

Implications

The findings and implications of this paper can be summarized as follows:

1) Vertical differentiation by using shared quality standards could increase the disparity in the quality of, and demand for, higher education.
2) Horizontal (functional) differentiation that follows the rule of comparative advantage can potentially alleviate such disparities while realizing cost efficiency.
3) Many universities will lose self-sufficiency as they are expected to focus on specific functions.
4) But at the national or regional level, universities through networking can meet the comprehensive needs for higher education.
5) But as the market enlarges, particularly in a global market with more players assuming the same function, vertical differentiation will occur within the framework of horizontal differentiation.

In the global market, there will be an incentive for universities to partner with those with higher quality in the same function. This implies that we may witness increasing stratification of the market. Disparities occur again, but this time in larger areas on a larger scale. This suggests that vertical differentiation within the framework of horizontal differentiation seems to follow the law of competitive advantage.

This paper analyzes the economic impact of the recent call for functional differentiation in higher education by applying several economic theories. It suggests that in a global setting, particularly through cross-national networking among universities, functional differentiation potentially brings about greater disparities in demand for university education. This study is at the exploratory stage and further theoretical as well as by empirical analyses are expected.

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Beyond the University: International university co-operation and network capital

Brian D. Denman* and Neil Dunstan**

Abstract. The idea of a university has evolved from Newman's view of an institution that imparts knowledge to one which not only imparts but also advances it. At present, the university plays an essential role in developing people who are engaged in their communities and who are concerned about key social issues. It also helps individual students to live better lives. At institutional levels, internationalization is seen as becoming increasingly important while, at global levels, there is greater emphasis on students attending internationally oriented universities in hopes of becoming better prepared for the workforce. According to the World List of Universities, there are 17,500 universities and other institutions of higher education, roughly half public, the other half privately sponsored.

Given the variety of institutions that represent the higher education sector worldwide, to what extent are higher education institutions responding to global change? Are they guiding nation-states toward knowledge-based economies? Are they concerned with global rankings and introducing key performance indicators to improve quality in research and teaching? Are they doing more for less, particularly since the Global Financial Crises of 2008 and 2011? Are they becoming more elitist and exclusive?

Drawing upon data collected from studies of international university co-operation, this analysis suggests that universities are struggling with internationalization strategies and are undertaking major structural adjustments. It is argued that educational mobility, access, equity, and quality are important elements in any educational institution and that the more an entity utilizes its network capital for engagement and collective will, the more likely it will gain in its reputation. This is true whether it directs its attention to societal or individual outcomes.

The study utilizes a unique computer technology program (StatPlanet) to present dramatic statistics pointing to virtually unconsidered deficits in the developing world's capability of meeting future educational needs at the university level. Attention is specifically directed to the Asia-Pacific region.

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Introduction

From its traditional roots to its current context, the university represents academic scholarship. Broadly speaking, it exists to educate and advance knowledge, provide a sense of creative and critical thinking, and arguably offer a cultural lens on the way we approach knowledge. Its features include a scaffolding of knowledge production, the pursuit of higher learning and 'truths', professional education, and, in some contexts, self-cultivation (Rothblatt, 1997, p.40). Initially, however, it had one purpose: imparting knowledge.

Husén (1991) rightly proclaims that the initial conception of the university differs enormously from what exists in present-day terms, shifting influence from historical, cultural and economic factors to knowledge production and a high technology, information-based society. It would be a monumental undertaking to analyze the literature addressing the changing roles of 'the university' from past to present. However, a brief overview is necessary in order to identify patterns and to demonstrate the evolving nature of the university in its contemporary context. The seminal works investigated include those by Neave, who has contributed to Europe's inter-territoriality; Husén and Marginson, who have independently emphasized the development of university models in Western Europe, Australia, and the United States; and Welch, among others, whose work includes the historiography of the peripatetic scholar and *peregrenatio academica*. This discussion will hopefully demonstrate that there are gaps in the literature treating regionalization and the way in which international university co-operation is a necessary imperative for the survival of the institution 'university' to meet societal and individual expectations.

Accordingly, the goal of this discussion is to review generally-known common patterns and themes of the past in order to present some of the major issues and trends affecting higher education in general and more specifically, the university as an institution in its present-day context. The analysis draws from research spanning 15 years and demographic data collected from the Global Monitoring Reports 2005, 2008, and 2010. The information utilized was transformed into visual media using StatPlanet, an interactive software program that maps, animates, and visualizes data according to country. Given our focus on the Asia-Pacific region, most all of the data concentrates on the 48 countries representing that region, and includes projections of participatory rates from primary, secondary, and tertiary levels to the year 2020.

The peripatetic scholar and the pre-university

Referring to the transfer of higher knowledge across geographical borders as the peripatetic professor and itinerant scholar moved from place to place to seek not only financial security but also safety, Welch comments:

> [M]any centuries before the common era (BC), and periodically ever since, philosophers and alchemists pursued their life's work in many different cultural contexts, often at great risk. At times, they were persecuted for their unpopular views, or by those who sought profit from their knowledge and skills, or who wished to prevent the wider world from gaining the advantage of new knowledge (Welch, 1997, p.1).

Circa 551-479 BC, Confucius (*Kung, Fu Tse*) taught his students the notion of civic responsibility with the intent to teach all who wished to listen. During the Chún-Chíu Period, Confucius travelled from his home country of Lu Guó to Sung, Wei, Chí, Chên, Tsái, and Chú to seek a role in administering government while, at the same time, teaching all students who wanted to follow him (Hóu & Zhou, 1992). Huntington labeled this period of time as "…civilization Confucian" (Huntington, 1996, p.45). In mid-5th Century BC, the Sophists of ancient Greece taught their specialties in return for money and would travel large distances to attract students who sought "training, argument, and education" (Welch & Denman, 1997, p.15). While investment in education was not necessarily perceived in the same light as it is in present-day terms, the decisions for an individual to become educated had more to do with 'connections' to the upwardly mobile and noble classes (Welch, 1997). As Bourdieu states,

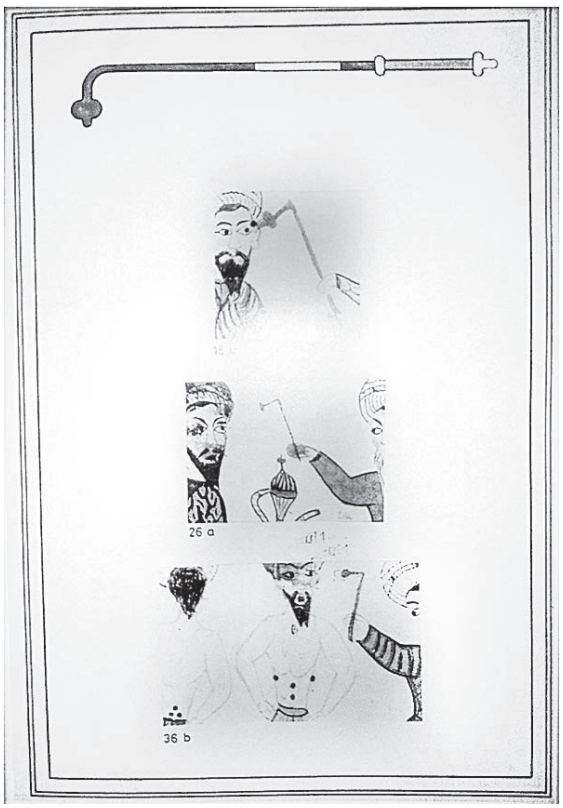
> What was at stake in the competition pitting noblemen of the robe against noblemen of the sword, the robin of book learning against the knight and chivalrous education, as well as against the cleric, a man of the book like the robin, but one prevented from hereditary transferring of powers and privileges, was the autonomization of a bureaucratic field and, correlatively, the constitution of corps founded on a completely new combination of principles of domination and the legitimation of dominance: cultural capital as with the clergy; heredity and the transferability of wealth, as well as devotion to public service, as with the nobility. (Bourdieu, 1998, p.378)

Civilization-building

During the 4th to 7th Century BC, pre-Islamic Arabia, originating in the Arabian peninsula, had a vast network based on Nabataean trade routes and later – after 630 BC – spread Islam west across North Africa and into the Iberian peninsula and, at the same time, east into central Asia, the Subcontinent, and Southeast Asia (Huntington, 1996). While 'higher learning' was emphasized in well-established monastic institutions within this region such as Nalanda-Bihar (5th Century BC), Bait Al-Hekma-

Bagdad (830 BC), Jama'at Al-Qaraween-Fes (859 BC), and Amaysa Madrasa-Amaysa (1090 AD), these pre-universities produced a corps of disciples recognized by the time spent with a Master at the institution – ultimately leading to the development of educational degrees. This development spurred interest in demographic and social considerations based on civilization-building, which ultimately resulted in Ibn Khaldun's *Al-Omran*, an early publication on population growth and geographic considerations leading to growth (Al-alwani, 1982: online).

Perhaps the first Arab university, Al-Azhar University-Cairo (970 AD) encouraged students like Euclid – the father of plane geometry – and Pythagoras – who discovered the so-called Pythagorean Theorem – to promote innovation and foster extensive interchanges of goods and ideas (Anderson, 1990, p.355). In Turkey during the Ottoman Empire, one of the first known health care facilities was established in the Amasya *madrasa*, which ultimately led to the Empire's first book on medical practices in 1110 AD and later, the ultimate establishment of Turkey's first hospital in 1208 AD (Uzel, 2004, p.11). Figure 1 illustrates early use of acupuncture methods (Eastern medicine) to treat migraines. While the *madrasa* was best known for teaching medical surgical procedures, they also taught acupuncture, suggesting that knowledge transfer in the Middle Ages was two-way.



Source: Uzel (2004, p.37)

Figure 1. Illustration of cauterization for acute migraine

Although secular and religious education were provided in separate educational systems, the Amasya *madrasa,* like its higher education counterparts in Constantinople (Istanbul), were considered centers of higher learning for both East and West. Particularly during the Roman (c. 27 BC – 393 AD) and Byzantine (c. 330 – 1453 AD) Empires, students and peripatetic scholars from both Europe and Asia would flock to Turkey to learn about new and innovative medical applications and practices.

Whatever the differences in university systems and models (see Husén, 1991; Marginson & Rhodes, 2002), these scholarly centers served the greater society-at-large by developing skilled personnel, were considered significant cultural institutions, and provided an important site for disseminating and preserving knowledge (Welch & Denman, 1997).

Feudalism and 'Peregrenatio Academica'

Coulborn identifies feudalism as a period when civilization is in decline, "…beginning when intellectual innovation comes to an end, or…becomes more and more attenuated, concerned with smaller and smaller items of knowledge" (Coulborn, 1956, p.367). As universities began to establish a firmer hold in Western Europe, the peripatetic and itinerant scholar held allegiance to *Sacerdotum*, the transcendent spiritual power represented by the Papacy, *Imperium*, represented by the Holy Roman Empire, and *Studium*, the emphasis on 'study' at the university level (Neave 1997). Academic degree holders were generally held in high esteem – similar to the status of those awarded knighthood or membership in a holy order. Those who were 'studying', often found themselves confronting the realities of passage to such privileges. As Pedersen states:

> "[I]t is clear that the existence of a wandering student could easily obstruct his studies. The numerous critics of the *vagantes* stress the worldy temptations that these young people could fall into in taverns and country inns, and several times synods forbade clerks to visit such dangerous places (Pedersen, 1997, p.136).

Freeman Butts (1967) asserts that various civilization-building forces have led naturally to a social environment conducive to fostering, and implementing formal and informal international relationships in a higher education space. Neave terms such a mobility space as 'inter-territorial' (Neave, 1997, p.3). However, in the early stages, the university was not necessarily viewed as an imperative to society writ-large, but rather as offering an education to an exclusive few. Ancharano's work suggests that academic privilege had more bearing, distinguishing students as 'scholars' and craftsmen's apprentices as "…engaged in lower tasks and should therefore have lower rights" (Ancharano in Pedersen, 1997, p.143).

Later in the 13th Century AD, 'peregrenatio academica' became common practice in the West, at least in the form of Latin instruction, a uniform system of study [Trivium and Quadrivium], and examinations. (Welch & Denman, 1997). This resulted in building institutional infrastructure around curricula, which resulted in standardized structures in early universities, particularly those situated in

Europe. Accreditation was seen as an award of merit vested by the Pope or, at times, the Emperor, granting license (Studium Generale) to teach at any other university in Christendom without undergoing further examination (Neave, 1997, p.3). In terms of mobility, the University of Bologna in 1265 listed international students representing thirteen countries (Pederson, 1997, p.143)

Renaissance and research in academia

Circa 1500, disputational teaching exercises gave rise to the research seminar, which allowed scholars the chance to offer specialized training through the tutoring of a select group of students for research collaboration (Clark, 2006). In disputational exercises, students would take turns responding to the instructor in each respective teaching session (Ibid.). This led to a teaching style that helped establish "…the pursuit of research as an activity demanded of advanced students and, indirectly in the seminar, of professors too" (Ibid., p.142).

Initially, however, university-based research was not recognized as an integral facet of the institution. Husén contends that, in fact, research developed by accident (Husén, 1991, p.172). During this evolutionary stage, the university was best characterized as a guild, which included a master (professor) and students, who gathered often for study around a particular specialty or trade.

Reformation and the rise of the professional state

State control of universities began to take place as early as the 1630s, when the first Chair in Government or Political Science was introduced at the University of Uppsala (Neave, 1997). Knowledge became codified in a territorial standard and credentialing became a condition of employment, at least for high public office. Rothblatt writes:

> For the higher civil service, one needs not only an aggregate of well earned knowledge, but also a view of the whole, correct judgment about relations of particular parts, a multifaceted, cultivated ability to synthesize, a wealth of ideas and ancillary methods…To pride oneself of this talent, one must have penetrated into the sanctuary of academic knowledge (*in das Heiligtum der Wissenschaft eingedrungen sein*). Thus the state opens it [the sanctuary of knowledge] for its future servants, and will receive them only from it (Wilhelm von Humboldt in Rothblatt, 1997, p.444).

It was in the 1800s when different university models began to become apparent. German universities initially developed a sophisticated system of an academic senate based on professorial chairs in faculties, usually consisting of the disciplines of theology, jurisprudence (law), medicine, and arts and philosophy (Clark, 2006, p.28). English universities, on the other hand, conceptualized 'colleges' within a university framework that included masters, doctors, and fellows. The latter approach was adapted by their North American descendants. Later, the German model influenced

the introduction of utilitarianism and research there. As Husén comments:

> When John Henry Newman held his famous lecture in 1852 on 'The Idea of a University', making a plea for 'knowledge being its own end' and refuting the Baconian concept of utilitarianism, the idea of research and teaching being conducted in close connection began to materialize at German universities, with institutes and seminars being established around university chairs. (Husén, 1991, p.175)

At this stage in development, the introduction of state-building, creating new government institutions and strengthening existing ones (Fukuyama, 2005, p.xvii) meant standardizing university practices. This included the containment and control of teaching and learning freedoms. Clearly, the Church also wielded its range of influence over knowledge content and distribution at this point in time.

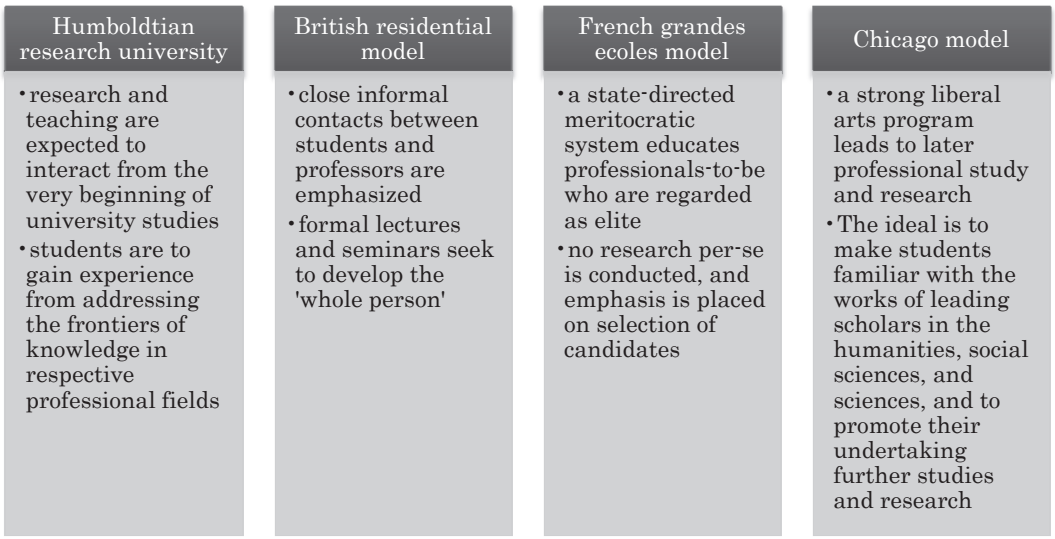
Overseas expansion and globalization of higher education

The globalization of higher education has become increasingly valued, particularly in terms of overseas recognition of world-class universities, international rankings, and the competitive nature of university researchers to out-perform one another. The Information Age has not only transformed the way we communicate and collect information, it has also led to some unforeseen consequences: the standardization of curricula (Bologna Accord); increased levels of accreditation and accountability; and a general shift towards a utilitarianism of professional, applied degrees, much to the chagrin of those who endorse Newman's idea of a university. Peripatetic, itinerant, and wandering scholars are increasingly more mobile – both literally and virtually – but are becoming more inclined to seek educational opportunities for economic gain rather than intellectual well-roundedness. This is becoming increasingly apparent in times of economic uncertainty as evidenced in the Global Financial Crises of 2008 and 2011. Evermore students have opted for professional degree pursuits because of their obvious need to seek gainful employment upon successful completion of the degree.

All the above has resulted in a general shift from viewing higher education as something of social value to something that is more of an individual investment. This may be due in part to the theory of human capital, formulated by Theodore W. Schultz in 1960 (Alladin, 1992). Human Capital Theory helped to justify the expansion of higher education by postulating that the more education a population receives, the greater the benefits to the economy. While individual investment in education is clearly on the increase – particularly in the case of enrollment in private universities – there is a general perception that higher education serves the public good. This, unfortunately, is beginning to wane. The commodification and advancement of knowledge comes at a cost, and while research continues to be an imperative in the modern university, those institutions identified as poorly resourced cannot keep meeting rising demand.

Globalization of universities and international university co-operation

The globalization of individual universities, in contrast to the general state of higher education, considers the structure, function, and purpose of such entities. While the evolutionary nature of the university highlights an emphasis on infrastructure (models) and key actors (professors/students), the university in its contemporary context is as varied as ever.



Source: Modified from Husén (1991, p.176)

Figure 2. Illustrations of university models

Figure 2 illustrates different university models with particular reference to geographic representation (Humboldt, British, French, Chicago). As the university as 'institution of higher learning' evolved over time, however, these 'models' became convoluted and distorted, making it increasingly difficult to classify and differentiate between types.

Considering reputation, many long-standing universities have been better known for their structural 'bricks and mortar' as opposed to their model, characterized by a group of institutions that represent the so-called 'best' in their respective countries. These include the 'Ivy League' and 'Sandstone'. To a lesser degree, there are also the 'Red Brick', 'Civic', 'Plate Glass', and 'New Generation' universities[1]. In 2012, massive open online courses (MOOCs) have been introduced, breaking down 'university walls' and developing specific courses from the ground up. The latest

[1] 'Red Brick' universities were part of a movement from private research institutes to civic institutions situated in industrial cities in the late 1800s. 'Red Brick' is synonymous with 'Civic' universities, although some scholars prefer to use 'Civic' over 'Red Brick'. 'Plate Glass' universities refer to their architectural design in the 1960s. 'New Generation' universities refer to those institutions founded after 1970.

include edX, Coursera, and Udacity – all of which offer a select group of free, structured courses online with no student selection criteria. Upon successful completion of the course, students receive certificates of completion. As in the case of their university parents, the challenges for MOOCs are the vast amount of resources to establish themselves, the heavy reliance on high technology to feed information from university to student and vice versa, and the use of computer-assisted assessments (see Edwards, 2012: online). Moreover, the issues with institutional 'brand' and identity come in play. While MOOCs appear to be responding to the increasing need to educate for a specific set of skills, the concern about how certificates (and eventually degrees) from edX or Coursera are weighed with respect to traditional degrees is yet to be determined. Whatever the label, academic degrees conferred at universities have been perceived throughout history as badges of honor:

> …a moral subject or juridical persona beyond the physical person. (Clark, 2006, p.197)

The majority of internationally-oriented universities have developed from political, economic, and cultural interests as well as from the scope and scalability due to high technology and increasing levels of mobility. Given the fact that the majority of these institutions are authorized by national governments to 'serve the public good', their allegiance generally is to serve the people from within their nation's territorial jurisdiction. Only a handful are affiliated with a parent university, as in the case of The Global College (University of the Punjab), the University for Peace (Universidad de Costa Rica), and Vancouver University Worldwide (Vancouver University). The same is true with MOOCs, which have been developed initially by individual academics at specific institutions (*e.g.* Coursera at Stanford), but are becoming more accepted through inter-institutional partnership.

If universities are changing to meet the needs of global-oriented, knowledge-based societies, it may be worth noting that international university co-operation is on the increase, and that the services universities provide may have as much of an impact on the 'global' society as the stand-alone university.

Neave writes:

> This is not to deny the very concrete and operational issues which are grouped around "it" (globalisation) and which administrative convenience has brought together under this head – cooperation between institutes of higher education, student exchange, staff mobility, access policies, recognition of diplomas, transferability of credit units. Indeed, the very nomenclature and felicitous acronyms that designate the higher education programmes themselves are redolent of a resurgent continuity, of ties reknit between past and present and of times when Humanism, travel and the High Renaissance last held the nations and their universities together: ERASMUS, LEONARDO, SOCRATES stand as the symbolic expression of a past seen as common and, if one dwell a little upon it, are instruments to recreate those hopefully happy days. (Neave, 1997, p.1)

If an international university co-operation is deemed desirable to meet higher education needs within regions of the world and not just within a nation-state, it may be useful to classify various forms of cross-border higher education:

- *Satellite [Offshore] Campuses*: Campuses are set up by an institution from one country in another in an effort to provide its educational or training degree programs in the recipient country;
- *Memorandum of Understanding Schemes*: An institution (A) approves an institution (B) in another country to provide one or more of A's programs to students in B's country;
- *Island Study Abroad Programs*: An institution (A) offers its own students its academic programming in another country with or without collaboration from another institution (B);
- *Semi-Affiliated and Wholly-Affiliated Study Abroad Programs*: An institution (A) recognizes and offers academic study at an institution (B) in another country as partial credit towards a degree program at institution (A);
- *Continuing Education Programs*: Degree and/or training courses designed to focus on specific fields of study from institution (A) in affiliation with institution (B) located overseas;
- *Twinning*: Agreements made between institutions (A) and (B) in different countries to offer a joint degree or qualifying degree program;
- *Corporate Programs*: Programs are offered in another country by businesses and accredited by an institution (A). These often involve accreditation across national borders;
- *International Consortia and Alliances*: A network of three or more universities or other institutions of higher education working cooperatively to offer degrees and conducting research;
- *Distance Education Programs*: A degree or training program that is delivered by institution (A) to other locations throughout the world by means of satellites, computers, correspondence, or other technological means. (Denman, 2007, pp.11-12)

Although these kinds of cross-border higher education entities are academic programs rather than the products of specific, stand-alone institutions, they nevertheless have a significant impact on the development of higher education. In many ways, they fit the style of 'imagined communities' that exist within the broader context of an institution's mission. Accordingly, they are subject to the same forces that affect other parts of higher education – positively and negatively. This includes increasing levels of regulation and accreditation. International quality assurance agencies and accreditation entities have proliferated, as illustrated in Table 1, and a significant percentage are specializing in external quality assurance in higher education, including what might be typified as [international] distance education delivery.

Table 1. Alphabetical listing of international, national, and professional accreditation entities

INTERNATIONAL	NATIONAL	PROFESSIONAL ACCREDITATION
Accreditation Council for Theological Education in Africa (ACETEA)	Accreditation, Certification and Quality Assurance institute (ACQUIN-Germany)	Accreditation Board for Engineering and Technology (ABET-USA)
Adventist Accreditation Agency	Accreditation Commission of the Government of the Slovak Republic (Slovak Republic)	Accreditation Council of Occupational Therapy Education of the American Occupational Therapy Association (AOTA-USA)
Arab Network for Quality Assurance in Higher Education (ANQAHE)	Accreditation Committee of Cambodia (Cambodia)	Accreditation Council on Optometric Education (ACOE)
Asia Pacific Quality Network (APQN)	Accreditation Council, Bonn (Germany)	Accreditation for Marital and Family Therapy Education (AAMFT) (USA)
Association of African Universities (AAU)	Agencia Espanola de Cooperacion Interuniversitaria (AECI-Spain)	Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) (USA)
Carribean Area Network for Quality Assurance in Teritary Education (CANQATE)	Agency of Accreditation (Albania)	Akkreditierungsagentur fur Studiengange der Ingenieurwissenschaften und Informatik (ASII) (Germany)
Conseil Africain et Malgache pour l'Ensignement Superieur (CAMES)	Agentur fuer Qualitaetssicherung durch Akkrediteirung von Studiengangen (AQAS-Germany)	American Association of Family and Consumer Sciences (USA)
European Association for Quality Assurance (ENQA)	Association of Accrediting Agencies in Canada (AAAC-Canada)	American Bar Association (USA)
European Universities Association (EUA)	Association of Indian Universities (AIU-India)	American Dietetic Association (USA)
Higher Education Quality Management Initiative for Southern Africa (HEQMISA)	Association of Specialised & Professional Accreditors (ASPA-USA)	American Health Information management Association's Council on Accreditation (AHIMA) (USA)
Iberoamerican Network for Accreditation and Quality assurance in Higher Education (RIACES)	Australian Universities Quality Agency (AQUA-Australia)	American Osteopathic Association (AOA)
International Network of Quality Assurance Agencies in Higher Education (INQAAHE)	Austrian Federal Ministry for Education, Science and Culture (Austria)	American Physical Therapy Association, Commission on Accreditation (APTA)
International Quality Review Project (OECD)	Bureau Veritas Quality International (BVQI-Bulgaria)	American Psychological Association (APA) (USA)
Nordic Quality Assurance Network (NOQA)	Center for Quality Assurance in International Education (USA)	American Society of Exercise Physiologists (ASEP) (USA)
Southern African Development Community (SADC), Southern African Regional Universities Association (SARUA)	Comision Mexico Estados Unidos para el Intercambio Educativo y Culturale (COMEXUS) (Mexico)	American Speech-Language-Hearing Association (ASHA) (USA)
The Network of Central and Eastern European Quality Assurance Agencies (CEEN)	Commission for Acupuncture and Oriental Medicine (ACAOM-USA)	American Veterinary Medical Association's Council on Education (AVMA-COE)
UNESCO-World Bank Initiative for Quality Assurance Capacity (GIQAC)	Commission on Higher Education (Philippines)	Association of MBAs (AMBA)
World Association of Universities and Colleges	Commission on Community/Junior College Accreditation (USA)	Association to Advance Collegiate Schools of Business (AACSB) (USA)
World Trade Organisation (General Agreement on Trade in Services)	Commission on Non-Degree-Granting Accreditation (USA)	Association of Teological Schools in the United States and Canada
	Committee for University Academic Programmes (New Zealand)	Board of Registered Nursing
	Consejo de Ciencia y Technologia (CONACYT) (Mexico)	Canadian Engineering Accreditation Board (Canada)

INTERNATIONAL	NATIONAL	PROFESSIONAL ACCREDITATION
	Coordinating Council of Private Education Association (Philippines)	Commission of Accreditation in Physical Therapy Education (CAPTE) (USA)
	Council for Christian Colleges and Universities (USA)	Commission on Accreditation for Marriage Family Therapy Education (USA)
	Council for Higher Education Accreditation (Sudan)	Commission on Accreditation of Allied Health Education Programmes (CAAHEP) (USA)
	Council for Higher Educational Accreditation (CHEA-USA)	Commission on Collegiate Nursing Education (CCNE)
	Council of Higher Education in Puerto Rico (USA)	Commission on Dental Accreditation
	Distance Education Council (India)	Computer Science Accreditation Commission/Computing Sciences Accreditation Board (CSAC/CSAB) (USA)
	Distance Education and Training Council (USA)	Consejo Nacional de Acreditacion (Accrditation for Nursing and Agronomy) (Colombia)
	Dutch Flemish Accreditation Organisation (Netherlands)	Council for Accreditation of Counseling and Related Educational Programs (CACREP) (USA)
	Federation of the Universities of the Islamic World (FUIW)	Council for Interior Design Accreditation (USA/Canada)
	Fund for the Assistance for Private Education (FAPE) (Philippines)	Council on Aviation Accreditation
	German Accreditation Agency/Council (Germany)	Council on Education of the Deaf (CED)
	Ghana National Accreditation Board (Ghana)	Council on Social Work Education (CSWE)
	Higher Education Accreditation Council (Tansania)	Education Network (United Kingdom)
	Higher Education Commission of Pakistan (Pakistan)	Educational Standards Board of the Board of Examiners in Speech-Language Pathology and Audiology (USA)
	Higher Learning Commission (USA)	Estonian Higher Education Accreditation Centre (Estonia)
	Hungarian Accreditation Committee (MAB) (Hungary)	European Foundation for Accreditation of Hotel Schools (EFAH) (Netherlands)
	International University Accrediting Association (USA-unrecognised)	European Quality Improvement System (EQUIS-Europe)
	Japanese University Accreditation Association (JUAA) (Japan)	Federal Aviation Administration (FAA) (USA)
	Licensing and Accreditation Board of the Republic of Macedonia (Macedonia)	Foundation for International Business Administration Accreditation (FIBAA)
	Lloyd Register Quality Assurance (UK)	Indian Council of Agricultural Accreditation, New Delhi (India)
	Middle States Association of Colleges and Secondary Schools (USA)	Indian Council of Agricultural Research (ICAR-India)
	Ministry of Education (France)	International Association for Management Education
	Ministry of Education and Research (Romania)	International Association to Advance Collegiate Schools of Business

INTERNATIONAL	NATIONAL	PROFESSIONAL ACCREDITATION
	Ministry of Education of Japan (Japan)	Midwifery Education Accreditation Council (USA)
	Ministry of Higher Education and Sport (Poland)	National Agricultural Accreditation Board (India)
	Ministry of National Education (Poland)	National Architecture Accrediting Board (NAAB) (USA)
	Ministry of Education (Department of Licensing, Accreditation, and Certification) (Russian Federation)	National Association of Schools of Art and Design (USA)
	Ministry of Education, National Accreditation Board (SIRIM) (Malaysia)	National Association of Schools of Music (NASM) (USA)
	Ministry of Education (South Africa)	National Association of Schools of Public Affairs and Administration (USA)
	Ministry of Education (Taiwan)	National Association of State Directors of Teacher Education and Certification (USA)
	Ministry of Education of the Kyrgys Republic (Kyrgysstan)	National Committee on Foreign Medical Education and Accreditation (USA)
	Ministry of Education of the Republic of Belarus (Belarus)	National Council for Accreditation of Teacher Education (NCATE) (USA)
	Ministry of Education of the Republic of Moldova (Moldova)	National League of Nursing Accrediting Commission (USA)
	Ministry of Science and Research, North-Rhine Westphalia (Germany)	Society for Range Management
	National Accreditation Board (Indonesia)	Society of American Foresters
	National Accreditation Committee of Higher Education (Mongolia)	Stiftung der Deutschen, Osterreichischen and Schweiserischen Wirtschaft
	National Accreditation Council (Colombia)	The American Chemical Society (USA)
	National Accrediting Body of Indonesia (BAN) (Indonesia)	The Medical Quality Assurance Agency of the Consortium of Thai Medical Schools (Thailand)
	National Agency for Evaluation and Accreditation (Bulgaria)	USA Department of Veterans Affairs (USA)
	National Agency for Accreditation (NOKU) (Norway)	
	National Agency of Academic Accreditation (Romania)	
	National Assessment and Accreditation Council, Bangalore (NAAC) (India)	
	National Association of Schools (USA)	
	National Board of Accreditation (India)	
	National Commission of University Accreditation (CONEAU) (Argentina)	
	National Council for Academic Assessment and Accreditation (NCAAA)	
	National Council for Higher Education Accreditation (NCHEA) (USA)	

INTERNATIONAL	NATIONAL	PROFESSIONAL ACCREDITATION
	National Council of Academic Assessment and Accreditation (Romania)	
	National Council of Academic Estimate and Accreditation of Institutions of Education of the Republic of Moldova (Moldova)	
	New England Association of Schools and Colleges (NEASC) (USA)	
	New Zealand Qualification Authority (New Zealand)	
	New Zealand Universities Academic Audit Unit (AAU)	
	North Central Association of Colleges and Schools (USA)	
	Northwest Association of Schools and Colleges (USA)	
	Northwestern Association of Schools and Colleges (USA)	
	Philippine Association of Colleges and Universities Commission on Higher Education (PACU-COA)	
	Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU)	
	Polish State Accreditation Commission (Poland)	
	Quality Assurance Agency (United Kingdom)	
	Southern Association of Colleges and Schools (USA)	
	Technical Universities Accreditation Commission (Poland)	
	The Israeli Council for Higher Education (Israel)	
	The Office of National Education Standards and Quality Assessment (Thailand)	
	The South East Europe Education Cooperation Network	
	University Grants Commission (UGC) (India)	
	USA Council for Accreditation of Higher Education (USA)	
	Virtual University Accrediting Association (USA-unrecognised)	
	Western Association of Schools and Colleges (USA)	

Source: Denman (2009, Appendix B)

Due to the increase in compliance policies and regulatory standards imposed on universities and their institutional partnerships, Jarvis contends that universities are now bureaucratic corporations.

> …universities are themselves – not in the sense that academics have always been cosmopolitan – in opening campuses in different countries and having their sales teams in those countries to attract fee-paying students to enrol in their courses. In addition, distance education is attracting increasing numbers of students to study with them, and here we see how the control of information technology adds power to the multinational corporations. (Jarvis, 2007, p.75)

Confidence crisis

Husén identifies the modern university as an entity working towards many different goals while at the same time training professionals. Apart from expectations to improve educational access, promote equality, and offer quality instruction, "…it is expected to contribute to the extension of the frontiers of knowledge by high-quality research" (Husén, 1991, p.184). While academic staff generally show their loyalty to their discipline more than to their employer (the university), if a student demand system dictates what degrees are kept or discarded, this creates angst in maintaining a strategic presence in one's discipline or field of study whether research-active or not. An ageing workforce and poor succession planning further escalate this angst, particularly when universities are asked to cut budgets and 'casualize' staff appointments from permanent to fixed-term.

As Alladin observes:

> The university has become a place where a student is trained for an occupation rather than given a broad education in traditional fields (Alladin, 1992, p.6)

Given regulation, standardization, and quality control measures, metrics and benchmarking are increasingly tied to funding opportunities so are therefore becoming an evidence-based necessity. These processes must be tightly monitored and justified; otherwise, they become cost-ineffective and dysfunctional.

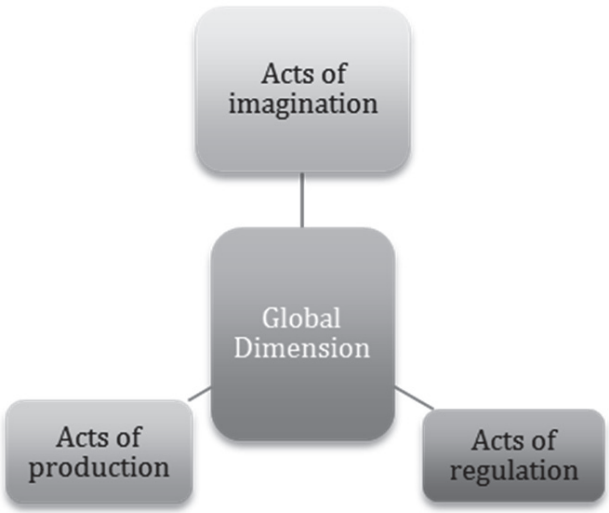
Husén rightly suggests that academic competence must be forced to yield to the power of numbers (1991, p.184). The advent of the Information Age has shifted the focus away from Newman's idea to a more utilitarian approach. As Rothblatt writes:

> For Utilitarians the test of any institution's worth was whether it served the general interest or stratified public opinion, conditions illustrated by the successful overthrow of imperial rule (Rothblatt, 1997, p.6).

From state to human to network capital

Since the late 1700s, when national identity was in its ascendency, there was a belief that the teaching of certain subjects could produce a public citizenry. This historic period of time resulted in the founding of some universities by a nation-state for the purposes of educating the nation for the nation. In 1960 and beyond, when Human Capital Theory was initially introduced, the onus was placed on both the nation-state and individual to educate and be educated, not for the sake of knowledge, but for economic gain and perceived benefits. In the advent of mounting global issues and demographic shifts, however, the university as an institution is struggling more with its identity, mired by overregulation and increased bureaucratization, but still seeking a sense of purpose. It is believed that other forms of education, including international university co-operation, will emerge not only to offset the high costs associated with higher education and its various programs, but to serve the greater good of geographic regions or develop other forms of network alliances. As Toynbee states, "[s]ociety is the total network of relations between human beings. The components of society are thus not human beings but relations between them" (Toynbee, 1972, p.50).

While league tables and university rankings will continue to promote 'brand' and 'identity' for both institutions and individuals alike, it is the network capital that will drive social change and open up educational opportunity and engagement. Figure 3 reflects a framework for shaping a global dimension through the use of network capital.



Source: Marginson, Kaur & Sawir, Eds. (2011, p.41)

Figure 3. Shaping of the global dimension by nation and institutions

Acts of production

Metrics are increasingly used for benchmarking university performance (New Public Management). They are an evidence-based necessity, but they must also be tightly monitored and justified. The overarching challenge is to not let form overtake substance.

Acts of regulation

There is a proliferation of accreditation and quality assurance agencies worldwide. Overuse could lead to cost ineffectiveness. Quality assurance measures developed in-house may have more credence and viability than those that resort to external audits.

Acts of imagination

New forms of network capital are forming to create bridges and stimulate research and teaching synergies between universities. These informal networks promote sources for new innovation and advancement.

> One thing we know about creativity is that it typically occurs when people who have mastered two or more quite different fields use the framework in one to think afresh about the other. (Marc Tucker in Friedman, 2007, p.316)

An understanding of the university as an entity and its possible future can also be attained by the use of demographics. As an example, demographic data, compiled from secondary sources, allow researchers to analyze, interpolate, and replicate from different perspectives (Smith, 2006). This helps broaden opportunities for discovery through comparative analysis and advocates the increasing need to understand situational, 'country' contexts. While caution should be exercised when interpolating results from census reports such as the Global Monitoring Reports, the data utilized over a timespan of twelve years helps verify estimations and predictions up to 2020. Parenthetically, the Global Monitoring Reports did not include data from countries such as Sudan or Taiwan, which suggests that secondary data must be thoroughly analyzed and scrutinized for anomalies.

Demographic data concerning primary, secondary, and tertiary student participation rates in the Asia-Pacific were collected from the Global Monitoring Reports (2005, 2008, and 2010). A linear regression model was the method used to estimate projected growth or decline in numbers. Splines, mathematical formulas that estimate values, were also considered, but a linear regression model proved more fitting for the 48 countries representing the Asia-Pacific. The statistics compiled were entered into an open-sourced software package called StatPlanet (Van Cappelle, 2012: online) to essentially visualize the data in proportion to the world and, more specifically to the region.

Demographic trends based on StatPlanet

When accessed via the two URLs below, the first one reflects the cumulative number of students by level (primary, secondary, and tertiary), by country (Asia-Pacific) and within the timeframe from 1998 to 2007. With this data, we were then able to project forward estimated values of participatory rates from 2011 to 2020. While projections are clearly fraught with numerous assumptions and questions about 'what if', the data compiled for visual display help to represent our best 'educated' guess as to what must be done to plan and prepare for the future. Readers are directed to the following URLs to understand the magnitude of the impact of demographics on student participatory rates in the Asia-Pacific region.

- http://mcs.une.edu.au/~neil/UNESCO-Enrolments/StatPlanet.html
- http://mcs.une.edu.au/~neil/UNESCO-Projections/StatPlanet.html

Data are presented over specific timelines and can be compared against different and like-minded countries within the region. This new form of data presentation is purposely void of analysis to allow further discussion, exploration, and debate to continue.

Reconsideration of issues, trends, and future challenges

Given the variety of institutions that represent the higher education sector worldwide, to what extent are higher education institutions responding to global change? While universities are entrenched in bureaucratic red-tape and somewhat marred by their historical roots, a few institutions and a great many individuals from within the university are attempting to make a difference in responding to global change. They are doing this through network capital and their persistence to make change happen.

Are universities guiding nation-states toward knowledge-based economies? It can be argued that universities are guiding nation-states through knowledge production and dissemination. However, it is hoped that this discussion has proven a need to consider moving beyond nation-states and into regional blocs to deal with the onset of overwhelming student demand and an undersupply of institutions (schools and universities).

Are they concerned with global rankings and introducing key performance indicators to improve quality in research and teaching? Global rankings are here to stay, but ranking an institution's level of academic quality as a whole needs further examination. Are global rankings the

best way of measuring academic success? Key performance indicators are indeed necessary, because they are tied to funding opportunities. The overarching concern is whether each and every university has the resources necessary to compete for such funding. Is this the best way forward?

Quoting Boyer:

> The scholarship of discovery, at its best, contributes not only to the stock of human knowledge but also to the intellectual climate of a college or university. Not just the outcomes, but the process, and especially the passion, give meaning to the effort. (Boyer, 1990, p.17)

Are universities doing more for less, particularly since the Global Financial Crises of 2008 and 2012? Are they becoming more elitist and exclusive? Universities are struggling to change in the face of an ever more fluctuating and turbulent environment. Change is an imperative, but responding to change quickly and decisively requires much hindsight – appreciation of history, culture, and context – leadership, and vision. Whether universities cater to the elite or are open to all and all-inclusive, it is now obvious that there are a vast range of institutions that can accommodate each and every interested student.

Beyond university

This discussion has concerned the university and its life from beginning to present. With new technological tools used to highlight and accentuate demographic data concerning student participatory rates, projections have been made that suggest that universities and their subsidiaries must change to meet dramatic swings in student demand at international, regional levels by 2020. While historical, cultural, and economic factors will continue to influence 'the university' the institution as we know it is likely to change. In order to maintain and successfully build resources around high technology and cutting edge research, a university for the public good cannot sustain such activity without the proper resources. As a result, privately financed think tanks, foundations, and corporate donors are on the rise. Will they overtake the advancement of knowledge 'beyond university'?

Whatever scenario is presented, it is of critical importance to recognize and cultivate the mind of those willing and able to seek an education, and not just for employment purposes. The best bet is to work with the infrastructure we know best, and to continually attempt to expand and improve it.

> Give me a man who is liberally educated and I will give you a man who will never want for a job, for he knows how to think, not just how to do. (Wriston, 1939)

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Higher Education in Algeria: Evolution and perspectives

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Abstract. Through an examination of the evolution of higher education in Algeria, this paper attempts to highlight, on the one hand, the achievements as well as the limits of policies pursued by this sector and, on the other, to focus specifically on the conditions surrounding the implementation of the reform called Licence-Master-Doctorate (LMD)[1].

Finally, we will discuss what precipitated the necessity to implement a quality assurance system within higher education institutions and how, once identified, the necessity was addressed.

Keywords: higher education, Algeria, reform, LMD, quality assurance

Introduction

Since Algeria's independence in 1962, national higher education policies have achieved some successes, especially in the management of massification, but have also faced many constraints and difficulties. Beginning in 2004, Algeria joined the international higher education reform of the Bologna process known in Algeria (as in France) by the name of the LMD reform. Operationalizing this reform has posed many difficulties. Very recently, in order to move towards the achievement of the reform objectives, the Algerian higher education system launched a quality assurance policy.

This process, currently being implemented, attempts to respond as well to the country's new socio-economic needs, to support economic development efforts and to facilitate the adaptation of the Algerian higher education system to an international standard of quality.

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[1] LMD: Licence-Master-Doctorate, equivalent of BMD (Bachelor-Master-Doctorate) in Bologna process system.

I. Higher education in Algeria: Management of flows and graduates unemployment

1. The management of flows

In Algeria, graduate education is one of the principal components of an overall policy of development, and so co-exists with a certain number of related objectives such as the democratization of access to the university, the satisfaction of the national economy's human capital needs for managerial staff and senior executives, and the training of a national body of lecturers and university researchers to assume leadership through international cooperation.

The demographic boom of the first years post-independence and the extension of primary and secondary schooling boosted the number of students which then increased steadily, except during the period 1993-1996, which reflects a period of financial difficulty. Higher education institutions managed, sometimes in a difficult context, to enact their missions. In 2012[2], the higher education sector – consisting of 91 institutions (47 universities, 10 university centers, 19 high national colleges, 10 preparatory colleges, five high teacher training colleges) spread over 48 cities – was required to guarantee places for more than 1,200,000 students.

Automatic access to the university by those who successfully passed the baccalaureate exam carries with it many privileges, including a scholarship and access to subsidized services (meals, transportation, accommodations) at almost no cost to the student. As an example, during the academic year 2004/2005 (MESRS, 2005, p.12), 50.5 percent of the students reside in student dormitories (no fees required) and 93.3 percent received a scholarship.

However, the progress in access achieved by the Algerian university cannot hide certain realities such as:

- The main concern of the State was addressing an increasing social demand, resulting in a valorization of quantitative mass enrollment goals, holding the university hostage to a management policy of flows. But, does the State have the capacity to reconcile contradictory demands such as responding to enrollment massification while assuring the quality of the delivered degrees?
- An important part of higher education budget goes to the subsidized services described above to the detriment of purely educational services. This situation raises questions about the best way of helping students;
- The efficiency of the public spending is low and the rational use of resources was not usually at the center of state concern;
- Quantitative expansion in student enrollment with an insufficient ratio of lecturers[3], a significant

[2] http://www.mesrs.dz/etablissements.php?eetab=1

[3] 27,500 lecturers from which 15 percent of superior grade.

rate of student failure, and low certificate or degree output relative to enrollment (10 percent initial enrollment) led to Algerian universities being classified as among the weakest in the world (Union Européenne, 2001, p.12);

- Achievement cannot be limited to physical evidence (enrollment numbers, accommodations and food service capacities *etc*.) but has to extend to other aspects such as pedagogy, the evaluation of scientific research (Abbou, 2010);
- Sometimes obsolete training programs;
- A much too centralized and bureaucratic management which, due to its nature, does not fully exploit the university's human and intellectual capital (Ghalamallah, 2008).

These difficulties related to management, organization and governance were only increased by the dysfunctions of the university in interacting with its environment on a national level (liberalization of the economy and employability of higher education graduates as well as on the external (international commitments and new higher education trends).

2. The university and its internal environment: Increasing graduate's unemployment

The university is defined as the organizational connection between the society and knowledge. The existence of the University means that the society recognizes that knowledge is a necessity and an appropriate specific function (Segal, 1997).

In Algeria, immediately post independence, government decision-makers were confronted with the challenge of estimating objectively the national economy's needs for graduates while under very strong social pressure to expand the size of the very limited educational and training system. The university took up the challenge of quantitative expansion and is, at present, confronted with the problem of academic quality and the relevance of existing programs and forms of study. Indeed, university performance is judged by the capacity of their graduates to successfully enter the labor market, and the quality of their training is often measured by the congruence of the match between student competencies and knowledge produced by the university and the demands of available jobs in the world of work.

Certainly, while the university is not a professional training center, it must nevertheless take into account the requirements of the labor market, the new and complex expectations of a learning society, and the enhanced internationalization of higher education. The evolution of qualification levels for employment in increasingly global corporations in terms of skills and competencies requires that the university focus on improving the employability of its graduates.

Algerian youth place increasing pressure on the labor market where unemployment has reached disturbing levels (Berkane, 2009, p.151). While total[4] unemployment fell by two thirds between

[4] http://www.ons.dz/IMG/pdf/emploi_chomage_2010.pdf

2000 and 2010, from 30 to 10 percent, the number of higher education graduates among the unemployed has increased. Indeed, the rate of unemployment among the population having no degree is estimated at 7.3 percent whereas that of graduates has reached 21.4 percent. These figures show, without any ambiguity, that there is a very strong correlation between educational level and unemployment rate; and higher educational levels seem to penalize women more particularly insofar as they are much more affected by this phenomenon (33.6 percent of women were unemployed as against 11.1 percent of men).

The university faces a double difficulty: reconciling the contradiction between the existence of massive unemployment among graduates and a shortage of skilled workers in certain sectors, because of a lack of correspondence between educational programs and the labor market needs. This inadequacy of programs is due, partially, to the fact that the Algerian university is not sufficiently open on its economic and social environment. This situation has negative consequences on university development, the quality of education and consequently on the graduates' employability, and does not allow the University to know neither the expectations nor needs of its environment (evolution of the labor market, the new needs in qualifications). No university in country can boast of having conducted a study of satisfaction of the users of its product, *i.e*. employers. The student is confronted with an abrupt break of any relation with the university after obtaining the degree and finds no structure of support for entering into professional life. Often, the relation and link between the university and the social economic sector is reduced to its simplest expression and both universes mutually ignore each other.

The unemployment of university graduates has been aggravated by the abandonment of the government's massive recruitment policy in the public service, the shortage of jobs created for higher education graduates, the loss of jobs caused by the state Programs of Structural Adjustment, and sometimes by the decision of the graduates to remain unemployed until they find a job suitable to their academic credentials. So, a part of this unemployment may be explained by an economic context characterized by low absorption capacity for the most qualified workforce; however, it is also certainly true that an improvement of the quality of programs in terms of their better correspondence with the new labor market needs could improve the employability and entry of graduates.

The situation is even more serious for graduates in the most qualified occupations – more exactly, in those for which there is an international labor market – where barriers to labor market entry is considered as a factor favoring emigration. Indeed, a significant portion of scientists, engineers and other highly skilled students, for whom education was assured with the public funding, constitute privileged targets for the multinational companies and for developed countries' governments. Consequently, the country gains no advantage from its investment. This migration of highly skilled people towards the developed countries, and more recently towards the Middle East, constitute an important problem for the political and higher education decision makers. A reorientation of this international mobility outflow seems to be more than necessary.

The institutions of the State and the business sector in general, do not sufficiently develop their capacities for study and reflection. Indeed, as an example, the absence of industrial demand in research and development – because of the fact that the economy is based on local companies with low technological capacity dealing essentially with the assembly of products conceived somewhere else – does not favor the links between both universes. This policy, which follows an international division of labor which distributes research and development activities to developed countries, discourages the development of economic growth on the basis of knowledge and innovation (UNESCO, 2005, p.106) which constitute the pillars of the economies of the 21st century.

II. The reform LMD

Any reform is perceived as an effort to adapt a system to its environment, adaptation made necessary by the changes which characterize any environment. The different reforms in the higher education sector of in Algeria reflect this phenomenon. Since the first reform of the 1970s (which had the benefit of being both global and structural) until the LMD, the objective has remained the same: enable higher education to adapt better to a new environment.

Without returning to previous reforms which contributed to the reconfiguration of the landscape of higher education in Algeria, the introduction of the LMD reform was seen by the government as an opportunity to end the various dysfunctions within higher education. This reform, touching at the same time both the contents and the organization of studies, was supposed to change profoundly the practices of higher education institutions, in terms of their governance, programs of study, relations with the economic environment and international cooperation.

In Algeria, the LMD system came into effect in September 2004 and was extended to all the Algerian universities after a period of coexistence with the former system. While the LMD reform is actually in its seventh year, many questions, on the part of both internal stakeholders (administration, students, and lecturers) and external stakeholders, including employers and the general public, remain unanswered.

1. Objectives of the reform

In the light of the recommendations of the C.N.R.S.E[5] (2001) and the directives of the implementation plan of the educational system reform adopted by the government in April 30th, 2002, the Minister of Higher Education has elaborated a ten-year strategy of development for the sector over the period 2004-2013.

One of the main components of this strategy is the elaboration and the implementation of a global

[5] National Reform Committee of Educational System

reform of higher education, the first stage of which is the implementation of a new "architecture" of education, accompanied by an updating of the different educational programs, as well as a reorganization of educational management. That was, in fact, the beginning of the introduction of the LMD reform in the Algerian higher education system.

Officially, the new system (LMD) had to address all the deficiencies of the former system (collectively called the classic system) and to achieve a number of objectives including:

- Improve the quality of training programs;
- Facilitate the entry of students into the labor market;
- Train for life-long learning;
- Protect the autonomy of higher education institutions ;
- Open the university to the outside world;
- Harmonize the higher education system with the rest of the world.

Since its experimental launch on 2004 within ten institutions, the LMD system progressively extended its reach as an increasing number of the universities adopted it[6]. Apart from some resistances in a few domains such as law, architecture, and medicine, training programs in LMD are now available in the quasi-totality of the higher education disciplines.

2. The implementation of the LMD reform

The difficulties met on the ground and certain resistances appear to have compromised the realization of certain objectives especially those bound to the improvement of education quality and student mobility.

The coexistence of two systems (the LMD system and the classic one) – a situation specific to Algeria – was attributed to a lack of rigor and/or of conviction by the central authorities who seem unable either to persuade concerned parties (lecturers and students) or to impose on them the new system – as was the case in Morocco and in Tunisia. Moreover, this coexistence complicated the management and follow-up of schooling and education. One may question at this stage the decision to implement this reform without consulting the academic community? Would it not be due to certain pressures as suggested by Lepoivre (2007)[7]: "The European universities adopted an organization of studies which they impose on their African counterparts which have to imitate them."

[6] The motivation for adopting the LMD system by a large number of universities was not a mass demand from students, but mainly the insistence of higher education authorities communicated to the heads of establishments.

[7] "the Participation to these programs (Tempus, in particular) will certainly be conditioned by the existence of educational systems compatible with the one set up by the Bologna Process.", p.37

This coexistence made teachers less motivated to get more involved[8] and generated little incentive from students and their parents[9] to join the new system:

Table 1. Trends in the number of students registered in LMD, 2004-12

Year	Number of students registered in LMD (Licence/Bachelor)
2004/2005	6,194
2005/2006	18,884
2006/2007	58,101
2011/2012	600,000

Source: Ministry of higher education

These numbers, even in the opinion of the authorities, remain insufficient and show deficiencies in popular support and communication from the officials in charge of the reform during the first years of the implementation. At the beginning of the academic year 2012/2013, the rate of student registration in LMD had not yet reached 50 percent (600,000 among 1,247,000) (Sofi, 2011).

Beyond the numbers, the LMD system raises a certain number of questions:

- In terms of its philosophy, the system persuades even the most reticent of its capacity to achieve the objectives which are assigned to it, particularly in its main goals such as enhancing the autonomy of the university, the quality of education, and the development of a more responsible student. However its implementation in certain disciplines with large students' flows such as faculties of law, economics, management has not allowed its benefits in many domains (tutoring, periods of course practice, access of students to the documentation…) to be realized leading to the impression that it has simply been designed to reduce the length of years of studies (compared to the classic system) in the interest of achieving economies in public spending.
- In the face of the LMD reform, the university community continued to react in unanticipated ways. Conferences, seminars, *etc*. were regularly organized by the local administration to discuss the difficulties and exchange possible solutions to problems encountered[10]. As for the students, they have reacted occasionally strikes and sometimes with more or less violent demonstrations[11].
- In December, 2007, during the discussion of the law project on the orientation of higher

[8] It became necessary to undertake an investigation close to lecturers and students in order to determine the real causes of their skepticism or their insufficient adhesion to the new system.

[9] Some parents continue to play the managers of their children and orient them in their studies.

[10] The most important was "the national evaluation assizes of the LMD system" organized by the Ministry of Higher Education, in May 2007 and retransmitted by Visio conference to certain universities.

[11] Since the implementation of the LMD system, a huge number of demonstrations were on the front page of newspapers in Algeria.

education[12], members of parliament "rejected altogether this project, *i.e.* the LMD reform, in particular articles relating to the LMD reform and the opening of the university to the private sector … announcing to the government their dissatisfaction of the LMD system which they qualify as a failure, because of the important number of students who did not succeed since its implementation in 2004".

- A plethora of programs of study proposals: A lack in the global vision of the proposed training courses (programs of study), mainly as far as the articulation between Licence (Bachelor)/ Master is concerned. There appears a general tendency to offer students premature specializations at the level of the Bachelor's degree (licence), which sometimes leads to a multiplicity of academic programs of study in the same discipline. Moreover, it appears that since the beginning of the LMD reform, many universities were in a hurry to make an impressive number of study programs offerings[13], the consequence of which was that many Licence courses (bachelor courses) have little or no students.

Bachelor courses evolved in the following way:

Table 2. Number of accredited licence courses (bachelor courses), 2004-10

Year	Number of licences (bachelor degrees) accredited
2004/2005	270
2005/2006	501
2007/2008	581
2009/2010	1,487

Source: Regional Conference of the Centre

In spite of less than rigorous evaluation of students, the rates of student success are still hardly reassuring with regard to the goal of improving the student's assuming responsibility for learning and the quality of their training course. The testimony of different actors converge on the following assessment: Practices of the classic system are still profoundly settled in various stakeholders' minds. The administration continues in its old logic of management, the lecturer, little motivated, gives his lessons with the same contents and the same pedagogy and as for the student, the non presential (*i.e.* outside of class) study time[14] is used for idleness. The new system (Bachelor/Master/Doctor) was originally conceived (by the Anglo-Saxons) for students who would have to make up their academic profile by themselves and participate very actively in their training course, while the current Algerian

[12] "The LMD system and the privatization of the university discredited by the parliament", in the national daily *El Watan*, December 11th, 2007

[13] In 2006, one faculty of management and economical sciences in the East of the country opened 18 new bachelor's degree programs in a single year.

[14] A "non presential time of study" is the time of study outside the lecture room counted as part of the overall hours of a program.

educational system produces only passive students, who know just how to assimilate and recite in the various examinations that they undergo all along during the academic year. (Abou Bekr, 2006)

The scheduled time of study in terms of the number of weeks (18 weeks constitute a semester) is undoubtedly illusive, while it is admitted by all, including the ministry in charge, that in the reality, even in the best conditions, a semester never exceeds 12 weeks.

Pedagogical teams have raised, during their evaluation meetings, the lack of motivation in lecturers to orient themselves to the new system where additional effort is required from them to elaborate the contents of the program and to teach differently. But the option of maintaining the routine of the classic system remains. We can say that the university is experiencing difficulties in embracing change fully. Resistance is enormous, and this made it difficult to realize certain new practices such as the student tutoring; the close educational support and personal follow-up of students, and the organization of professional training periods in the labor market sector. We have created the impression that we make new with the old.

The prevalence of purely "academic" programs of study and a weak or non-existent link with the business sector remains one of the limitations of the system on which everybody agrees: the Algerian university is hardly open to its social and economic environment. Indeed, this self-reflexive attitude of the university does not enable it either to know the expectations and needs of the society or to undertake research activities relevant to economic needs and beneficial to cultural and social life in general.

The needs of the world of work in terms of skills requires greater attention by the university with the aim of improving the employability and labor market entry of its graduates. However, we can clearly notice that the large majority of educational programs offered for students by most higher education institutions are of a decidedly academic profile to the detriment of professional training programs, as shown in Table 3 below:

Table 3. Distribution of academic vs professional LMD licences (bachelors) offerings, 2007/2008

Types of degrees	Number of bachelors offers accredited	%
Academic	983	80.71
Professional	241	19.79
Total	**1,224**	**100**

Source: Regional Conference Centre

We notice that the professional programs represent only 19.8 percent of the overall accredited bachelor program offerings. The same situation is observed at the level of Master's offerings where, for the first time in Algeria for the academic year 2007/2008, only 13 Master's programs were

professional in nature from the 70 approved for the Eastern region of the country[15].

Pedagogical teams who are in charge preparing the training courses have serious difficulties in establishing with the social economic sector the necessary conventions which would enable them to develop professional training courses for students, and consequently they find themselves bound to offer more academic versions.

Even professional offerings developed on the basis of partnership are almost systematically limited to informal relations between the universities and corporations in the business sector. The answer is certainly not easy as Vincens suggested "the professionalization of the University does not consist in multiplying more and more too specialized training courses aimed for specific jobs, nor to transform programs of study in order to make educational courses said to be generalist (that is, not too specialized but more general)"(Vincens, 2006, p.33). Indeed, "the risk of 'dressing up' some traditional training courses in false courses said to be professional is not to be neglected." (Vincens, 2006).

Besides, the weakness of the link between the university and the business sector makes it difficult to realize the objective of life-long learning recommended within the framework of the reform LMD.

Finally, we can say that the isolation which has always characterized the Algerian university and which still persists risks undermining the success of the LMD reform. A bringing together of initial and continuous forms of training, a distribution of educational and training tasks between higher education institutions and the business sector, and development of partnerships constitute directions to be strengthened in order to ensure the success of the reform.

III. Implementation of quality assurance

1. Situation of higher education in Algeria with regard to international trends

An analysis of the situation of higher education in Algeria enabled us to note the system's relationship to international trends in higher education. Indeed, we can notice the following (Bouzid, 2003):

- A progressive quantitative expansion in students' enrollment (massification): this expansion must be assumed and encouraged, not only because of the principle of democratization of the society and reduction of inequalities in access to higher education, but also to address local socio-economic needs and the current requirements of the knowledge economy and the learning society, strongly marked by the rapid evolution of science and technology.
- A diversification of programs and forms of study expected through the offering of training courses within the competence of higher education institutions, but building on linkages with the business sector;

[15] Preliminary report of the national conference of heads of establishments, Op. Cit.

- A diversification of funding sources: an opening towards different sources of funding; a policy to encourage higher education institutions to open themselves to their socio-economic environment, with the aim of valorizing their product and diversifying the funding sources, was adopted.
- The increase of graduates unemployment rate: this phenomenon has, according to many authors, increased because of the absence of studies on labor market needs and requirements and on the professional follow-up of graduates.
- Higher education quality and relevance became a major concern of the community, the public authorities and the economic environment. The inadequate match between the programs of study contents and socio-economic needs is considered one of the main obstacles for the improvement of higher education quality.
- A development of the international dimension urging higher education to identify the best approaches to international co-operation which should be based on partnership and the collective search for quality and relevance in higher education.

2. *Necessity to address local socio-economic needs and the international norms and standards of quality*

Everybody agrees that the economic and social development of a country is closely linked to the development of its educational system, in particular its higher education.

Rapid scientific and technological progress and the evolution of professions and knowledge more and higher educational qualifications for success in the labor market. The needs of the economy for highly qualified graduates are constantly growing, the result of which is the emergence of what we call nowadays the economy of knowledge.

The quality of higher education has become an increasing concern of various actors concerned with the results of higher education programs, *i.e*. authorities in charge of the sector, the public authorities, the students and their parents, the economic sector and the whole society.

In this context, higher education in Algeria is today called upon by the different stakeholders to respond to these quality and relevance requirement, *i.e*. to adapt itself and address the new socio-economic needs of the country as well as the international norms and standards of higher education quality (internationalization).

Institutions of higher education in Algeria have to make sure, from now on, about the quality of their students' training and employability. They have to prove to public authorities, to students and their parents, as well as to the society as a whole that they have implemented all the necessary means, that is a quality assurance system, enabling them to improve the quality of programs of study and research to best fit the new socio-economic needs of the country and the international standards of quality.

So, the implementation of a quality assurance system at the level of all higher education establishments in Algeria is today, as confirmed by the authorities in charge of the sector, an urgent necessity and a necessary tool for the management of change. Institutions of higher education have to start evaluations enabling them to discover their own weaknesses, their assets as well as the opportunities and threats which confront them and gradually change; to establish processes of evaluation reliable at all levels and to use efficiently the means which are provided to them.

3. Process of implementation of a system of quality assurance

The process of implementation of a quality assurance system in higher education in Algeria is still actually in the preparation phase.

The steps dealt with up to now can be summarized as follow:

a. Organizing an international conference and workshops

How do we successfully implement a quality assurance system within higher education institutions in Algeria?

This question was the purpose of an International Conference organized by the Ministry of Higher Education, in association with the World Bank, on June 1-2, 2008 in Algiers, and in which all the heads of higher education institutions participated, accompanied by the lecturers appointed to assist them with the implementation and the promotion of the quality assurance plans of actions.

This conference also gathered researchers from the OECD, the UNESCO and some experts in quality assurance from the Arab world.

The works of the conference were followed up by the organization of three main workshops focusing on:

- The quality assurance of programs (workshop 1);
- Institutional quality assurance (workshop 2);
- Implementation conditions for quality assurance in Algeria in the light of international experiences (workshop 3).

A meeting was held on June 3-4, 2008, to further develop recommendations from these three workshops. This meeting regrouped authorities from the Ministry of Higher Education, national academics and international experts in quality assurance. The objective of this meeting was to come up with a scheduled plan of actions necessary for the implementation of a quality assurance system in higher education in Algeria.

a.1 Main results of the conference and workshops

Concerning the main stages and the process of quality assurance implementation, it was emphasized that the principle of contextualization must be highlighted in the implementation procedure of the quality assurance system in Algerian higher education (MHESR, 2008).

As far as the stages are concerned:

- Quality is understood as adherence to standards (good practices), so, every higher education establishment should determine its quality indicators for benchmarking purposes;
- Development of a model of quality adapted from existing international models;
- The purposes: improvement quality and transparency;
- The processes: the self-evaluation and the internal evaluation are to be systematized;

As far as the means are concerned:

- Legislation;
- The necessary budget;
- Creation of an information system with the aim of a better circulation of information;
- Appropriate offices;
- Better needs assessment via systematic environmental scanning;
- Organizational structures to be re-activated: Educational Committee of Coordination (ECC), Scientific Committees (SC); organizational structures to be launched: the National Committee of Evaluation (CNE);
- Organizational structures to be created: units of quality assurance at the level of the department, of the faculty and of the university;
- Governance improvements: improve institutional management and reconsider the functioning of administration committees.

Concerning the evaluation of programs of study (training evaluation), the quality of training is measured in terms of attainment or achievement of the initial objectives fixed by the establishment. For that purpose, the implementation of a cell-quality[16], is proposed at the level of each university, which should proceed to an evaluation by program stage (beginning-middle, -end). The evaluation of outcomes should involve students and socio-economic partners. This same cell-quality may include the follow-up of graduates into the labor market.

[16] This cell-quality (or a quality assurance-cell) is a team composed of a president nominated by the head of the university and members representing lecturers (from different faculties), administration and students.

a.2 Main results of the experts' works[17]

The results of the experts' work focused mainly on the necessity to specify with precision the current objectives of higher education in Algeria and the context for implementation of the quality assurance system. Being interested in institutional evaluation as well as in program evaluation, five segments were retained for the institutional evaluation (related to pedagogy), and a single program evaluation was undertaken as a pilot at the national level.

The five segments in question are:

- Educational Management;
- Information systems;
- Problems of graduate employability;
- The student life experience;
- Resources (libraries, cyberspace, and multimedia).

All higher education institutions should be concerned with the evaluation of the five different segments.

Approaches:

- An external evaluation preceded by systematic procedures of self-evaluation within higher education institutions;
- The accreditation approach is not supported at the moment because it may lead to a decision to close an establishment, which is not possible at present in the Algerian public higher education.

After the definition of the necessary stages for the implementation of a quality assurance system, including the identification of organizational structures and their associated tasks, the resources and the necessary procedures, the final configuration that the quality assurance system higher education in Algeria should take must be made on the basis of consultation with the current standards in different countries and international agencies, in particular: European Network of Quality Assurance (ENQA) and International Network for Quality Assurance Agencies in Higher Education (INQAAHE).

It is also essential to anticipate the resistance which the implementation of the quality assurance system may face. For this purpose, participants should consider first the necessity to proceed, first, to the dissemination of the results of the conference at all levels and then, to elaborate a communication strategy which should be pedagogical, coherent and consensual and which would penetrate all the concerned actors (administration, lecturers, students, associations, unions and employers) in order to promote a culture of quality assurance.

[17] Plan of actions of the international meeting on quality assurance for Algerian higher education, June (2008)

b. Implementation of quality assurance cells

In accordance with recommendations of experts, a cell of quality assurance was established at the level of all higher education establishments presided by a Lecturer nominated by the head of the establishment and known to be the Responsible for Assurance Quality (RAQ).

c. The national committee for the implementation of quality assurance in higher education

This committee – officially established by the departmental order 167 of May 31, 2010 – began to work on the objective of quality assurance implementation at the level of higher education institutions in June, 2008, prior to the international conference cited above. The objective of this committee is to help promote the development of quality assurance practices in universities by working firstly on the internal evaluation in order to improve the governance of these establishments.

The non-exhaustive list of missions and objectives of this committee are (MHESR, 2012):

- To develop a specific protocol on quality assurance;
- To help with the implementation of teams in charge of quality assurance in higher education institutions;
- To examine quality assurance implementation experiences and practices in other countries;
- To elaborate a training program for the RAQs;
- To assure a specific training for the RAQs (actually in progress)

d. Implementation of a CNE

Such as stated by the law of orientation on February 23, 2008, the CNE was established by the departmental order 739 of December 18, 2010. The CNE is currently preparing its plan of action. It is the organ which is going to pilot the evaluation and the quality assurance system implementation (OJRA, 2010),

e. Perspectives (expected results)

The expected results are the following:

- A strong sensitization of higher education institutions to the management of quality, with the establishment of a common working methodology and communication tools designed to enable mutuality and perpetuation of quality assurance practices;
- Elaboration of common evaluation references, adapted to the local context;
- Identification and training of resources persons on quality assurance in order to disseminate

practices and make sure of their efficient implementation;

- An self-assessment of a predefined program of study;
- Appropriate tools will have to be determined to enable the implementation of a quality policy and the perpetuation of processes of self-assessment

Conclusion

Since independence, a tangible effort was made to adapt the higher education system in Algeria to changes at the national and international level. However, it is legitimate to wonder about the degree of efficiency of reforms and their capacity to respond to the rapidly evolving expectations in globalized knowledge society.

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