The Future of Higher Education

The Changing Academy

The academy has changed as much in the past 20 years as it did in the preceding half century:

• More women, minority professors, and adjuncts joined the professoriate.

• Information technology and new media technologies altered the student experience in fundamental ways

• The student body grew far more diverse.

• The values of the academy shifted:
  -- faculty autonomy declined
  -- disciplinary silos gave way to more interdisciplinary collaboration
  -- the sink or swim ethos gave way to greater stress on remediation and retention.

Here is a list of some of the most profound changes:

1. Higher education has grown more valuable economically.
   Over the past two decades, the earning power of a high school degree has fallen 20 percent and the earning power of a college degree rose by 20 percent.

2. But the cost of a college degree has risen sharply.
   Each year for the past quarter century, undergraduate tuition and fees have increased by an average of 2.5 to 3.5 percentage points above the inflation rate. Partly this is due to a decline in state appropriations.

   The share of state general funds going to higher education has shrunk by over a third over the past 25 years. On average, each dollar in private giving per student was met with a 20 percent cut in per student appropriations. Each dollar that tuition raised led to a one dollar cut in state appropriations.

3. And financial aid has failed to keep up with rising costs.
   Most aid now comes in the form of loans, and students from lower income families are less willing than more affluent students to take on large loan burdens to finance their education. There has also been a movement from need-based aid toward non-need-based aid. Fewer than 15-20 private institutions provide financial aid based solely on students’ financial need.

4. We have witnessed a growing stratification of institutions in terms of mission, resources, research grants, teaching loads, student bodies, and student experience.
   The average professor at a public doctoral university earned about 91 percent of what his or her counterpart earned at a private doctoral university in 1978-79. By 2003-4, the percentage had fallen to 77 percent.
5. A majority of faculty members now works outside the tenure system.
As of the fall of 2007, the tenurable comprised just one-quarter of the faculty population, down from one-third a decade earlier.

6. Post-doctoral fellowships and other non-tenure positions multiplied far faster than tenure track positions.
A smaller proportion of faculty members follow the once-standard model with traditional appointments and more are appointed on a fixed-term basis.

7. Expectations for junior faculty have escalated dramatically.
These include expectations about publications, teaching, and grantsmanship. In the humanities, faculty must become more entrepreneurial.

THE CHANGING STUDENT BODY

Facts of Student Life

1. The percentage of high school graduates enrolling in college is far higher than in the past
The percentage tripled between 1960 and 1975 and grew by another 23 percent until 1990, before stagnating

2. There is a glaring disparity in college attendance among higher and lower income students

3. There is a deepening divide in college attendance among female and male students
Currently, women comprise 57 percent of college students.

4. There has been a dramatic increase in student interest in business careers and a sharp decline of interest in school teaching, social work, nursing, the clergy, and other service careers

5. Time to completion has increased.
The mean time to completion in 1999-2000 was 55 months. Students who start at 2-year institutions and transfer to 4-year institutions take 71 months on average to complete their degrees.

6. There is increasing reliance on community colleges
Community colleges now educate more than half the nation’s undergraduates. 4 out of 10 community college students transfer to another institution—half to a 4 year institution.

7. Our educational pipeline is leaky.
Of every 100 9th graders,
68 graduate from high school on time
40 immediately enroll in college
27 are still enrolled during their sophomore year
18 graduate from college in 4 years

Among 9th Graders
17 percent of 9th graders eventually earn a GED
65 percent earn a high school diploma
18 percent drop out
51 percent enter postsecondary education
49 percent do not

8. Remediation has become more common.
28% of entering freshmen enrolled in one or more developmental course at all postsecondary institutions. The figure is 40 percent at community colleges.

Proportion of Entering Freshmen
Math 22%
Writing 14%
Reading 11%
Students who take remedial courses are much more likely to drop out of college
Changing Student Demographics

1. Students’ Demographic Profile and Outlook

1. Only 16 percent of the student population can be described as "traditional" in terms of entering college right out of high school, attending full-time, and living on campus.

2. A third are students of color. A fifth are immigrants or children of immigrants. Most of these come from bilingual homes or families in which English is not the primary language.

3. Many students are the first generation in their family to attend college. Many are significantly older than traditional students and must balance school with family or work responsibilities. More than 70 percent of students work, almost half are over the age of 25, and more than half are women.

4. Along with shifting demographics has come a shift in outlook.
   ▪ Many students seek a degree, first and foremost, as an occupational credential.
   ▪ Many have embraced the consumer mentality that regards instructors as service providers and assumes that because they have paid tuition, teachers should be responsive their needs.
   ▪ A surprising number of these 21st century students consider class attendance optional, convinced that they can master the course material on their own.

5. One of the most striking characteristics of 21st century students is that they are products of a technology-rich environment, which has shaped their educational expectations.

   They are natural multitaskers, who grew up doing homework, watching TV, listening to music, and instant messaging simultaneously, and who expect constant stimulation. These students:
   ▪ prefer visual modes of communication over speech or text alone;
   ▪ tend to scan large quantities of text, rather than simply focus intently on a single text;
   ▪ expect to quickly find the answer to any question online, usually through a search engine, often without evaluating the credibility or accuracy of the source;
   ▪ place a high value on interactivity and active learning and are comfortable with self-teaching.

2. Upcoming Changes in the Student Population

1. Between next year and 2015, there will be a sharp drop in the number of high school graduates in many states and a dramatic change in the racial and ethnic makeup of the student population.
   ▪ There will be a 10 percent decline in the number of non-Hispanic whites
   ▪ Minority enrollments are expected to rise from 30 percent in 2004 to 37 percent in 2015.

2. By 2022, almost half of all public high school grads will be members of minority groups.

3. Meanwhile, in Arizona, Florida, Georgia, Nevada, Texas, and Utah, there will be phenomenal growth across all racial groups, but particularly among Hispanic students.

3. Diversity Within Diversity

Racial and ethnic groups are not homogenous. Apart from gender differences, there are pronounced differences in identity. A recent study identified through distinct profiles of Latino students at elite institutions:
   ▪ Assimilators (26 percent)
   ▪ Accommodators (32 percent)
   ▪ Resisters (43 percent)

4. The Millennial Generation
Born between 1980 and 1994, this generation, which consists primarily of the children of Baby Boomers, is nearly as large as that generation.

- Helicopter parents: hovering, heavily involved, highly protective parents
- Many bring a consumer mentality to the classroom: You are there to serve them.
- Many have felt enormous pressure to succeed
- They are used to multitasking.

5. The Millennials at College
1. They face much higher college costs than their predecessors.
2. Many don’t come to college with skills that they need to succeed: note-taking, writing, and organizational and time management skills.
   The American Association of Colleges and Universities estimates that about 50 percent of entering college students are academically underprepared, lacking basic skills in either reading, writing, or math.
3. Many have little experience establishing priorities.
4. Many are shy about coming to office hours for help; you might consider requiring your students to come to office hours at the beginning of the term.

At elite institutions, 1500 is the new 1280. More than 50 percent of the students score more than 700 on the verbal SAT. In 1989, only one college in the top 30 had as many as 30 percent above 700.

How can we best meet the needs of students who are quite different from those we saw in the past? A few answers follow.

- Sensitivity to issues surrounding gender, religion, race, and ethnicity has never been more essential.
- There is often a substantial mismatch between faculty and student expectations for academic work; instructors must be very precise about the level of work they expect.
- Older students and working students expect instructors to be flexible and accommodating; it is important for faculty to specify policies regarding about missed classes and tests and late papers.
- Instructors need to consider adopting a hybrid form of instruction, in which certain forms of content are placed online, reserving more class time for discussion, inquiry, and participatory activities.
- Lectures might incorporate audio and visual resources, including charts and graphs, film clips, and simulations.
- A heightened emphasis might be placed on active, hands-on learning, including inquiry-based and problem-based activities.

Trends

1. More women
Women, who now comprise 57 percent of undergraduates, will make up 59 percent by 2013.

2. More students of color
By 2020, students of color will comprise 46 percent of the nation's total student population.

3. More transfer students

4. More low-income students, more first-generation college students, and more nonnative students whose first language is not English

5. More non-traditional students
These include more older students, more commuter students, and more students juggling school with work and family obligations. 37 percent of students work during the academic year, and 37 percent of these work 20 hours a week or more.
Increases and Decreases in Enrollment by State

Increases are projected for 20 states  Decreases are projected for 30 states
Arizona 71.5%     Minnesota -11.7%
Nevada 67.5%     West Virginia -11.9%
Florida 21.1%     District of Columbia -12.7%
Georgia 20.4%     Maine -13.8%
North Carolina 18.4%    South Dakota -21.1%
Texas 15.5%

Student Attitudes
1. Freshmen increasingly overestimate their own abilities, rating themselves as "above average" in virtually all academic areas
41% of students in 1997 rated themselves "above average" writer, compared with 27% in 1966.

2. A high degree of academic disengagement exists.
In 1997, some 36% of freshmen (compared with 26% in 1985) report having been frequently "bored in class" during their last year of high school.

3. In a national poll of 15- to 17-year-olds,
   - 25% said the "ability to formulate creative ideas and solutions" was extremely important;
   - 33% said the same of the "ability to understand the historical, cultural, and philosophical background of a current problem"; and
   - less than 40% said being "able to write well" was extremely important.

Admission Trends
- The trend toward making SAT scores optional for admission
- Over the next five years, the number of high school graduates will decline.

Challenges
1. One out of three college students drop out.
2. In 2003, about 15 percent of faculty were professors of color—compared to 29.5 percent of the students.
3. Tuition and fees continue to rise faster than inflation
   At private four year schools rose 71 percent between 1993 and 2003.

THE CHANGING PROFESSORIATE

1. The Shrinking Professoriate
   a. Tenure-track and tenured professors are a minority on college campuses. They are outnumbered by adjunct and contingent instructors and by administrators.
   b. Of the 1.3 million faculty members in 2005, 47.5 percent, were in part-time positions. That represents an increase in number and proportion from 2003, the last full survey of institutions, when 46.3 percent were part timers.
   c. Of the 675,624 full-time faculty members at degree-granting colleges and universities in 2005, 61.4 percent, were either tenured or on the tenure track. That is down from 65.2 percent in 2003.
   d. For the first time, more full-time college professionals are administrators rather than instructors. 22 percent had tenure, 9 percent were on tenure track, 10 percent were not on tenure track, and 7 percent were employed by institutions without a tenure system. The remaining 51 percent of full-time professionals did not have faculty status.

2. Contingent Faculty
   In recent years, the use of part-time faculty has increased sharply: from 33 percent of faculty in 1987 to 44 percent in 2003. Issues of concern include compensation (part-time faculty earn 27 percent of what fulltime faculty members earn), job security, workloads, and access to office space and travel funds.

   The proportion of contingent faculty varies by the kind of institution and by discipline. Two year institutions employ the greatest proportion of part-time faculty. 67 percent of their instructors are part-time faculty.
<table>
<thead>
<tr>
<th>Field</th>
<th>2003</th>
<th>Increase 1987-2003</th>
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</thead>
<tbody>
<tr>
<td>Education</td>
<td>55.5 percent</td>
<td>27.7 percent</td>
</tr>
<tr>
<td>Engineering</td>
<td>29.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>52.5</td>
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<tr>
<td>Humanities</td>
<td>46.9</td>
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<td>Natural Sciences</td>
<td>37.2</td>
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<tr>
<td>Social Sciences</td>
<td>37.4</td>
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The average length of service of part-time faculty is high, average 7 or more years at 2-year and at private and public 4-year institutions. In 2003, part-time faculty received on average, $2,399 per course at 2-year institutions, $2,773 at 4-year non-doctoral degree granting institutions, and $3,973 at doctoral degree granting institutions.

3. Academic Couples
A growing number of job candidates face a “two-body problem”—finding two professional jobs in the same geographical location. The problem is particularly acute for women, who are more likely than men to have a partner who is also an academic. For example, 43 percent of married female physicists are married to another physicist, compared to just 6 percent of male physicists.

Anti-nepotism rules do not apply, since they would violate federal laws which prohibit a policy that has an adverse impact on job opportunities for women. Possibilities:

- Shared or split positions:
  - Issues: salary, tenure evaluation, office space, departmental vote, access to start-up and travel funds, benefits
- Spousal hiring:
  - Hiring may be as a faculty or a staff member. Typically the salary is split, with one-third from the original hiring department, one-third from the partner’s department, and one-third from the dean or provost.
  - Soft money positions:
    - These include instructor, adjunct, visiting, and post-doc positions.
    - Non-Academic positions
    - Commuting

THE CHANGING ACADEMY

1. The Rise of the Community College
a. Half of all college students attend or previously attended a community college. 41 percent of first time freshman are community college students.
b. Half of community-college students leave after only one year.
c. There are now nearly 1,200 community colleges enrolling 11.5 million students (41 percent full-time).
  - 58 percent are over the age of 22; 16 percent are 40 or older.
  - 39 percent are the first generation to attend college.
  - 27 percent are employed full time and 50 percent part time.
  - 59 percent of nurses and 80 percent of firefighters and police officers are credentialed at community colleges

2. The Growth of Private, For-Profit Institutions
Small vocational institutions, with training programs which enrolled students with lower incomes than traditional universities for brief periods of time, have given way to a growing corporate for-profit institutions with longer programs that compete with community and public 4-year institutions.

The for-profit institutions tend to focus on areas that are profitable. Most degrees are in business, management, information science, and the applied arts, including graphic design, interior design, and fashion design. For-profit schools have identified types of students and programs that the traditional public and private nonprofit schools have paid relatively little attention to: students older than 18-25 and students who hold full-time jobs that restrict their availability to attend courses during usual school hours. These institutions have been leaders in online education and putting no-frills classrooms in easily accessed locations with parking.
The overwhelming majority of undergraduates—70-75 percent—still attend public colleges and universities.

Predicting The Future

Predicting the future is a fool’s errand. Nevertheless, certain developments do seem likely.

• **More graduate students will pursue “untraditional” careers.**
  A recent study of over 8,000 doctoral students in the University of California system showed that upon beginning their studies, 45 percent of men and 39 percent of women wanted to pursue careers as professors with an emphasis on research, but those percentages dropped to 36 percent and 27 percent respectively as time progressed.

  The reasons are readily apparent: work/family conflicts and the lack of job opportunities in the academy.

• **The proportion of instruction done by tenurable faculty will probably decline.**

  In 20 years, only 20 percent of all instructional staff will be tenured or on the tenure-track.

• **Demands for “accountability” will probably rise.**

  There will be a greater premium on demonstrated learning results in the evaluation of universities, departments, and faculty.

• **Revenue pressures will increase.**

  Grant getting will become more important.

Issues in Higher Ed

1. **Contingent Faculty:** How should faculty respond to issues raised by the increase in contingent faculty, including compensation, job security, teaching loads, and access to office space?

2. **21st Century Students:** How can we best reach students who bring high expectations to the classroom—about grades, interactivity, and technology?

3. **The Faculty Generation Gap:** How should junior faculty deal with the ratcheting up of expectations and requirements for new faculty?

4. **Gender and Racial Inequalities:** How might inequalities in salaries, rates of promotion, and service requirements best be addressed?

5. **Assessment:** Accrediting agencies and government are placing an increasing emphasis on measuring learning outcomes. How might assessment of students be used to improve educational practices and student learning?

6. **Intellectual Property:** How can we best protect faculty members’ rights as creators and users of intellectual property?

7. **International Students:** The proportion of Ph.D.s received by international students has jumped from 10 to 26 percent over the past 30 years. How can universities best serve and support international students?