This report summarizes current literature on trends that dramatically affect collegiate institutions. The following demographic changes are discussed: (1) increase in female enrollment; (2) decrease in enrollment of 18-year-olds; (3) increase in median age of students; (4) decline in enrollment and continuation of blacks; (5) increase in enrollment of Asians; (6) increase in Hispanic enrollment; (7) increase in enrollment of non-U.S. citizens; (8) greater enrollment of lower socioeconomic status students in lower quality institutions; (9) decline in quality of new student academic preparation; and (10) importance to students of future labor demand and salary upon graduation when choosing college majors. Increased demand for accountability from the state and federal government and decreased fiscal resources have also initiated an examination of traditional means and measures of efficiency and effectiveness. Meeting these needs for a new type of student body with new demands in the face of new technology has required leaders of institutions to reassess mission and role as well as instructional and learning environments. Attention has been focused on issues of faculty development, part-time faculty, faculty evaluation and freedoms, and faculty role in governance. The report includes a four-page list of references. (PS)
Emerging Trends in Higher Education

By
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Most critics see the current interest in the condition of higher education as a result of two movements at work in the larger arena of society. One is a general reform movement aimed at elementary and secondary education. Some say this movement has populist origins; others say it is an attempt to recast our educational philosophy and practices, so that the United States can regain its leadership role in economic development. Regardless of the motivation, much scrutiny has been given to K-12 education in the past decade. This scrutiny has now logically moved on to higher education.

The second movement that has precipitated the attention given to higher education is really the convergence of several trends (demographics, increased accountability, fiscal shortfalls) and events (national reports, federal budget reduction legislation) at a time when the resources of higher education are not sufficient to maintain the quality and productivity Americans and the world have come to expect from our educational system. These trends involve changing student characteristics, assessment and accountability issues, changing faculty characteristics, issues involving management and planning strategies, and program and curricula structure characteristics. It appears that the conditions brought about by these trends strain the system so that problems cannot be contained and the promise cannot be nurtured.

Much has already been written about the condition of higher education and the trends affecting it. There have been four national level studies on this convergence of the two movements (Involvement in Learning, To Reclaim a Legacy, Integrity in the College Curriculum, and Higher Education and the American Resurgence) and any number of scholarly and popular commentaries on it. This chapter, then, summarizes the current literature on the trends that dramatically affect collegiate institutions and state and federal level agencies concerned with higher education. The chapter can only describe the conditions beneath the swell of the tidal current. It will be up to the readers of this chapter to develop specific strategies to ensure a more predictable climate for higher education in the future.

Student Characteristics

There are several trends in student characteristics that will have significant impact on what and how we teach in higher education. These can generally be grouped into two areas: demographic characteristics and academic characteristics. The first set describes the changing nature of the student pool and the student body, and the second deals with students' preparation for college and career aspirations as they affect certain academic choices.
Demographic Characteristics

The changing nature of students in terms of age, race, and sex is well discussed in both popular and scholarly journals. Although certain kinds of institutions feel the changes more quickly than others—for instance, community colleges, or more intensely, graduate level training centers for the professions—nearly every institution has experienced some shift in the characteristics of their students. These trends as generally described in the literature are summarized in the following paragraphs.

In terms of sheer numbers, one study estimates that 5.2 million students were enrolled in public four-year institutions of higher education in the fall of 1985 (National Association of State Universities and Land Grant Colleges [NASULGC], 1986), a number slightly less than that of the previous year. Of this, a surprising increase of 3% was shown in first-time, full-time freshmen. The class of 1989 has several distinguishing characteristics reflecting changes in demographics, changes which may suggest a re-examination of programs, scheduling, and admissions, among other considerations.

The most striking demographic change is that now over half the students enrolled are women. While females have increased their rate of enrollment by 37% over the past decade, males have increased by only 3.5% (El-Khawas, 1986). Women enroll at higher rates at every kind of institution, and in the vast majority of programs. Their attendance at certain types of schools is dramatic. Community colleges first felt the effect of this trend, which now is making a significant impact on programs in graduate and professional education.

The status of students is also of note. According to the current American Council on Education's (ACE's) Campus Trends report (El-Khawas, 1986), higher education is experiencing its sixth continuous year of decline in the 18-year-old group, from which the majority of first-time, full-time enrollments have traditionally been derived. This trend has affected enrollments in a variety of ways. For example, while one-third of institutions reported an overall increase in enrollments for fall 1985—including at colleges and universities, increases in graduate students and, at community colleges, continued increases in part-time enrollments—there is an overall sense that enrollments are, at best, stable. Figure 1 illustrates changes in full-time equivalent enrollment.

![Figure 1. Changes in full-time equivalent enrollment. Note. From Campus Trends, 1986 by E. El-Khawas, p. 8. 1986, August, Washington, DC: American Council on Education. Reprinted with permission.](image-url)
Another characteristic difference in the enrollment profile in this decade is the age and ethnic background of the students. The median age continues to increase at almost all types of institutions, especially at baccalaureate and two-year institutions. Traditionally, the older student attends on a part-time basis. Many institutions are reporting decreases in full-time equivalency students, and this decrease may have a direct effect on formula funding for many state supported institutions. A very recent report finds a 3% increase in the number of part-time enrollees for Fall, 1985 (NASULGC, 1986).

Additionally, the ethnic background of students is changing. Nationally, black students enroll and continue at notably lower rates than in immediately previous years, although full-time enrollment is up significantly (8%) at public institutions historically black. Asian Americans continue to enroll and complete at dramatically higher rates (Butterfield, 1986). Enrollments of students with citizenships outside North America continue to increase.

These fluctuations in enrollment differ also by region. The trend toward increased minority enrollment is more dramatic in the western and southwestern states, where Hispanic enrollment continues to increase at over one-third of the institutions surveyed by ACE. Hispanics have increased their rate of enrollment nationally by 48% over the past decade. Asian Americans enroll and complete at higher rates in both eastern and western institutions. In midwestern universities, black enrollment is declining (El-Khawas, 1986).

Students' socioeconomic status (SES) seems to affect the kind of institution they attend. The basic correlation is that the lower the student's SES, the lower in the hierarchy of institutions the student attends; the least academically advantaged students and those from the least educated families are not well represented at the "best" institutions (Astin, 1985). This profile suggests that educational equity has not been successfully attained through our student financial aid policies or by our admissions practices.

As state and federal support for higher education decreases and tuition and other educational costs increase, an increasing number of students will have reduced options on selection of institutions or will graduate with a large debt from student loans. Still others will not be able to afford college at all or will find the need to put priorities on college in relation to other life activities, such as child rearing. Some researchers feel that attendance in higher education is linked to the general economic health of the country, and when the economic outlook is perceived to be good, families are more inclined to think they can afford college (Watkins, 1984). Others feel that with high unemployment, there is nothing to do but go back to school.

Minorities who are less inclined to secure loans for educational purposes will have yet another barrier placed before them. Even middle-class students may feel more inclined to attend more inexpensive state schools rather than private colleges. An even greater strain is projected to occur for the graduate and professional student who has already put several years into training for a profession, years that will be relatively useless unless the training is completed (Fiske, 1986).
This indebtedness also has impact on society in general. For example, the size of the loan program in 1986 is estimated to be in excess of $50 billion (Cronin, 1986). This amount constitutes a significant part of higher education's $102.2 billion dollar budget for 1985-86, 2.5% of the GNP (Higher Education and National Affairs, 1986, July 28). There are those who argue that the need to repay loans will influence student career choices, diverting students from lower paying careers in human services and decreasing altruism among college graduates who must repay educational debts rather than invest in the general society (Kramer & Van Dusen, 1986).

On another level, the fear of indebtedness affects student access. The more affluent and better educated classes are disproportionately represented in the top institutions. Students from upper SES levels have greater access to the institutions more likely to confer greater educational and economic opportunities (Astin, 1985). In particular, the four largest disadvantaged minority groups—blacks, Chicanos, Puerto Ricans, and American Indians—are underrepresented relative to whites at each level of degree attainment, especially at the graduate and professional levels. While minorities may have better legal access to educational opportunities than they used to, the increased costs weighed against returns and perceived likelihood of completion discourage these students from investment in student loans.

### Academic Preparation

The preparedness, or more appropriately the underpreparedness, of students today presents institutions with numerous challenges. The issues associated with the challenges touch many aspects of our society, most especially the K-12 system. For institutions and their funding sources, the task of providing comprehensive educational experiences at all levels is complicated by the underpreparedness of students. For society, the concern may focus on the issue of whether we have training and standards adequate to assure the development of the manpower in our nation.

That students are coming to college underprepared in some way is not debated; it is accepted as fact (Cross, 1971). The well publicized decline in standardized test scores until the past few years provoked public sentiment toward educational reform. It is only recently that the College Board has been able to report more than a one-point increase in the verbal score on the SAT (Phi Delta Kappan, 1985, November). The all but universal concern for student attainment of the basic communication skills has, among other things, threatened to change the job of the classroom instructor in all disciplines and at all types of institutions. For example, Astin (1985) reports that at UCLA, half the freshmen are required to take a non-credit remedial English composition course.

Many scholars argue that the raising of admissions standards as a solution will further stratify our society, especially in terms of minority attainment at the higher level (Astin, 1985). Such a strategy, they suggest, is not consistent with public policy (Green, 1982) and creates more immediate problems than it provides long-term solutions.
There is also a growing acknowledgment that even students who qualify academically are not fully prepared to use the collegiate experience in as positive a way as possible. For example, students who must work excessive hours to pay for their education or who select majors based on potential income in order to repay student loans do not have equality of choice in the educational experience. Students who are distracted by inadequate daycare for children and class schedules that do not fit their lifestyles are bound to receive less than a quality education.

**Program Choice**

Compounding the concern about financing higher study is, as was mentioned earlier, the apparent trend among students to consider salary upon graduation when choosing college majors. In addition, students choose academic majors in response to shifts in manpower needs. Trends in choices of majors reflect these responses. Table 1 illustrates trends in student degree majors:

Table 1

| Bachelor's Degrees Conferred by Institutions of Higher Education |
|-----------------|-----------------|-----------------|
| PROGRAM AREA    | 1973-74         | 1983-84         | % Change* |
| Business/Mgt    | 131,766         | 230,031         | 75%       |
| Communications  | 16,250          | 38,586          | 137       |
| Computer/Info Sci | 4,756         | 32,172          | 576       |
| Education       | 185,225         | 92,382          | -50       |
| Engineering     | 42,840          | 75,732          | 77        |
| For. Languages  | 18,840          | 9,479           | -50       |
| Health Sciences | 41,394          | 64,338          | 55        |
| English         | 55,469          | 23,739          | -39       |
| Library/Archival Sci. | 1,164    | 255             | -78       |
| Life Sciences   | 48,340          | 38,640          | -20       |
| Mathematics     | 21,635          | 13,211          | -39       |
| Phil/Religion   | 9,444           | 6,435           | -32       |
| Physical Sciences | 21,178        | 23,671          | 12        |
| Psychology      | 51,621          | 39,872          | -23       |
| Social Sciences | 150,298         | 93,212          | -38       |

*Minus sign indicates declines

**Note.** Source: Center for Statistics, U.S. Department of Education.

The salary offers to candidates for degrees in these fields give some insight into probable reasons for selection of certain college majors. In 1984, beginning salaries for accounting majors were $1,627 per month. Computer major students were offered $2,046, while engineering majors received $2,220. On the other hand, humanities majors received offers of $1,380 per month (College Placement Council, 1985 in U.S. Bureau of the Census, *Statistical Abstract*: 1986).
These shifts present both a picture of changing needs and a blueprint for planning. For example, with the anticipated teacher shortage facing the public schools, incentive funding in the form of financial aid packages might be used to induce students to major in education.

The number and kinds of problems facing institutions as a result of changing student characteristics are all but boundless. The shifts in student learners' needs and demand for programs come at a time of diminishing support for higher education both fiscally and perhaps philosophically. Institutional stress is understandably high.

Assessment

The current mood of consumer-as-king in our society has no doubt influenced the way we regard assessment of the learning process and evaluate the entire institution of higher education. Assessment is not a new concept in higher education, but it has taken on new implications in these times of reduced resources and increased accountability. In the literature, issues of assessment focus on student performance and institutional performance.

For most of its history, higher education has been its own assessor. In the classroom, the instructor has been the primary evaluator of student performance. It has been the institutions that determined the admission standards for themselves and in this way influenced what was taught in the K-12 system. Now concepts and methods of student assessment have begun to change and others are asking for a say in how standards are set and followed in higher education. In turn, the institutions are being held to standards established by outside agencies, a situation of some threat to many who view the academy as self-monitoring.

On the classroom level, new students have created the need for different teaching and evaluating techniques. The adult as learner has needs and uses for information not necessarily addressed by traditional learning and teaching methods. Within the past two decades, educators have come to a consensus that indeed the theory of adult learning, andragogy, is different from that of children, pedagogy (Knowles, 1973; Weathersby, 1980). The implications for classroom instruction and its alternatives are too extensive for discussion here, but by way of example, the restructuring of the class "hour" to better accommodate adult learning spans and the use of group instruction are examples of strategies utilized to make the learning environment more productive for the adult (Cross & McCarten, 1984). These new demands upon faculty and institutions will require a commitment and an investment of resources.

Of course, the adaptation does not end with instruction, but also focuses on assessment. Most institutions now have procedures in place to deal with nontraditional learning, e.g., the College Level Examination Program (CLEP). No longer is the college prep high school course the only route to attaining admission to higher education. The growth of community colleges in our recent history and the expansion of extension center education from major research institutions also evidence a new definition of college attendance. The awarding of the degree is no longer seen as the sole measure of the accomplishment of the aims of a college education.
Naturally, these shifts in teaching and evaluating bring about some inconsistency and adjustment problems. In addition, the so-called revolution of the 1960s opened up the college curriculum in a way that has not lent itself to easy closure. Much of the experimentation of that time now manifests itself in slight modifications of admission and program requirements.

This seemingly confused state within the institutions has led, in conjunction with a societal desire for more information for accountability, to evaluation methods being placed upon institutions by outsiders. For example, several states are now experimenting with "rising junior" examinations, designed to measure student attainment of basic information as a result of the experience of attending colleges for two years ("State Initiatives," 1985). Other states have placed strong testing requirements on persons wishing to enter occupations for which previously the only requirement was the attainment of a college degree in the field; state-level teacher examinations now being required in many states are examples of this kind of assessment. The literature reflects the great amount of debate surrounding this trend (Astin, 1988) and signals a continued period of adjustment to externally imposed criteria. Even among administrators and faculty, there is disagreement about appropriate methods of assessing student learning. Table 2 from E. El-Khawas' *Campus Trends, 1986* illustrates this discussion.

**Table 2**

<table>
<thead>
<tr>
<th>Appropriate Methods of Assessing Student Learning</th>
<th>2-Year Colleges</th>
<th>Baccalaureate Colleges</th>
<th>Universities</th>
<th>Total</th>
<th>Public</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>College-level skills tests</td>
<td>61</td>
<td>70</td>
<td>55</td>
<td>62</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>Tests in general education</td>
<td>48</td>
<td>71</td>
<td>51</td>
<td>55</td>
<td>52</td>
<td>59</td>
</tr>
<tr>
<td>Comprehensive exams in major</td>
<td>46</td>
<td>82</td>
<td>67</td>
<td>61</td>
<td>51</td>
<td>73</td>
</tr>
<tr>
<td>Attainment of &quot;higher order&quot; skills in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical thinking</td>
<td>69</td>
<td>89</td>
<td>79</td>
<td>77</td>
<td>73</td>
<td>82</td>
</tr>
<tr>
<td>Quantitative skills</td>
<td>74</td>
<td>88</td>
<td>83</td>
<td>80</td>
<td>75</td>
<td>84</td>
</tr>
<tr>
<td>Oral communication</td>
<td>83</td>
<td>88</td>
<td>82</td>
<td>84</td>
<td>81</td>
<td>88</td>
</tr>
<tr>
<td>Writing</td>
<td>85</td>
<td>91</td>
<td>87</td>
<td>84</td>
<td>84</td>
<td>90</td>
</tr>
<tr>
<td>&quot;Value-added&quot; measures</td>
<td>62</td>
<td>80</td>
<td>64</td>
<td>67</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>Placement tests, Mathematics</td>
<td>95</td>
<td>95</td>
<td>89</td>
<td>93</td>
<td>98</td>
<td>88</td>
</tr>
<tr>
<td>Placement tests, English</td>
<td>95</td>
<td>88</td>
<td>89</td>
<td>92</td>
<td>99</td>
<td>83</td>
</tr>
<tr>
<td>Placement tests, Reading</td>
<td>93</td>
<td>78</td>
<td>71</td>
<td>84</td>
<td>93</td>
<td>73</td>
</tr>
<tr>
<td>Placement tests, other skills</td>
<td>75</td>
<td>59</td>
<td>64</td>
<td>68</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>Pre- &amp; post-tests, remedial</td>
<td>85</td>
<td>78</td>
<td>67</td>
<td>79</td>
<td>90</td>
<td>66</td>
</tr>
</tbody>
</table>

These examinations of student performance are also aimed at assessing how well institutions are doing their jobs. Especially among state supported institutions, interest in improved effectiveness and efficiency has grown dramatically, both as a result of grass roots interest and as a result of the national level reports on the status of education. The limited resources on which a state must draw in providing services to its citizens and the competition for those resources have made the issue of accountability more than academic.

Institutions have been undergoing assessment of their effectiveness for most of their history. Nationally, the process of voluntary accreditation has for a long time satisfied the state about the institution's effectiveness. Now colleges and universities are being asked to demonstrate that they are doing their jobs, that they are using funds and resources effectively and efficiently to develop the talent within a state, on several additional criteria. Again there is great discussion about which measures are appropriate. Table 3 illustrates this debate.

Table 3

<table>
<thead>
<tr>
<th>Appropriate Measures of College Effectiveness</th>
<th>2-Year Colleges</th>
<th>Baccalaureate Colleges</th>
<th>Universities</th>
<th>Total</th>
<th>Public</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention/graduation rates</td>
<td>89</td>
<td>87</td>
<td>87</td>
<td>88</td>
<td>87</td>
<td>89</td>
</tr>
<tr>
<td>Degrees/certificates awarded</td>
<td>78</td>
<td>71</td>
<td>79</td>
<td>76</td>
<td>79</td>
<td>73</td>
</tr>
<tr>
<td>Pass rates/prof. licen. exams</td>
<td>82</td>
<td>75</td>
<td>84</td>
<td>80</td>
<td>87</td>
<td>72</td>
</tr>
<tr>
<td>Students served</td>
<td>76</td>
<td>69</td>
<td>67</td>
<td>72</td>
<td>77</td>
<td>65</td>
</tr>
<tr>
<td>Courses comp./credits earned</td>
<td>81</td>
<td>77</td>
<td>70</td>
<td>77</td>
<td>78</td>
<td>76</td>
</tr>
<tr>
<td>Test scores of grads (prof.)</td>
<td>58</td>
<td>65</td>
<td>80</td>
<td>66</td>
<td>67</td>
<td>65</td>
</tr>
<tr>
<td>Test scores, other graduates</td>
<td>56</td>
<td>52</td>
<td>67</td>
<td>58</td>
<td>55</td>
<td>61</td>
</tr>
<tr>
<td>Other measures of student learning</td>
<td>75</td>
<td>89</td>
<td>77</td>
<td>80</td>
<td>75</td>
<td>85</td>
</tr>
<tr>
<td>Percent going for further ed.</td>
<td>79</td>
<td>71</td>
<td>79</td>
<td>77</td>
<td>76</td>
<td>78</td>
</tr>
<tr>
<td>Achievements, recent graduates</td>
<td>75</td>
<td>86</td>
<td>83</td>
<td>80</td>
<td>75</td>
<td>86</td>
</tr>
<tr>
<td>Job placement rates of grads.</td>
<td>92</td>
<td>92</td>
<td>82</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Grads' performance on the job</td>
<td>89</td>
<td>78</td>
<td>74</td>
<td>83</td>
<td>86</td>
<td>78</td>
</tr>
<tr>
<td>Ratings by graduates</td>
<td>82</td>
<td>82</td>
<td>84</td>
<td>88</td>
<td>91</td>
<td>84</td>
</tr>
<tr>
<td>Long-term outcomes of grads.</td>
<td>82</td>
<td>95</td>
<td>83</td>
<td>86</td>
<td>81</td>
<td>91</td>
</tr>
<tr>
<td>Achievements of faculty</td>
<td>73</td>
<td>83</td>
<td>94</td>
<td>81</td>
<td>80</td>
<td>81</td>
</tr>
<tr>
<td>Instit. accomplishments in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants/contracts</td>
<td>63</td>
<td>53</td>
<td>83</td>
<td>64</td>
<td>67</td>
<td>61</td>
</tr>
<tr>
<td>Community services</td>
<td>81</td>
<td>68</td>
<td>85</td>
<td>78</td>
<td>87</td>
<td>67</td>
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<tr>
<td>Research</td>
<td>34</td>
<td>44</td>
<td>87</td>
<td>49</td>
<td>48</td>
<td>49</td>
</tr>
</tbody>
</table>

Faculty Issues

Assessment of institutions and students focuses attention on faculty and in particular on their roles as instructors. While some trends point to faculty development issues—tenure, retraining, workload—many are related to issues in the assessment area. Among these are part-time faculty, evaluation and faculty freedoms, and faculty role in governance. The first paragraphs of this section review these latter issues, while the last paragraphs return to faculty development issues.

Part-time Faculty, Governance

The argument for employment of part-time faculty has two main sides. On one side, there is a strong argument for the effective use of talent, particularly real-world talent, faculty who are practitioners, and the use of these faculty on a part-time basis. Practitioners in many fields are unwilling to take the dramatic cuts in salary required to leave business and industry and come to academe. Others lack the necessary academic credentials but have far more vast knowledge than any amount of graduate training can provide. These situations enable universities to utilize experts for smaller investments than would be needed to bring them into the system on a full-time basis. Since over 80% of an institutional budget is used for faculty and other personnel salaries, the salaries needed to attract experts would not be available under conventional funding systems (Gappa, 1984).

It is estimated that universities now employ one out of every three faculty on a part-time basis (NCES, 1984 in U.S. Bureau of the Census, Statistical Abstract: 1986). Although some of these faculty have selected part-time status as a retirement or preferred situation, there is mounting evidence that universities are able to use part-time faculty to their own ends without much concern for long term development or commitment. Some part-time faculty see their status as a waiting line function, feeling that they will receive a full-time slot when one becomes available. Regardless of the reason for their utilization, the number of part-timers has a significant impact on institutions. The following table illustrates the proportion of part-time faculty utilized.

Table 4

Number and Proportion of Part-Time and Full-Time Faculty, Real and Estimated

<table>
<thead>
<tr>
<th>Year</th>
<th>Total # (000)</th>
<th>% Increase from 1970</th>
<th>Faculty-- Instructor or Above</th>
<th>Faculty Including Junior Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full-time %</td>
<td>Part-time %</td>
</tr>
<tr>
<td>1960</td>
<td>276</td>
<td>--</td>
<td>154 65</td>
<td>82 35</td>
</tr>
<tr>
<td>1970</td>
<td>573</td>
<td>--</td>
<td>369 78</td>
<td>104 22</td>
</tr>
<tr>
<td>1976</td>
<td>793</td>
<td>38</td>
<td>434 69</td>
<td>199 31</td>
</tr>
<tr>
<td>1980*</td>
<td>846</td>
<td>48</td>
<td>466 69</td>
<td>212 31</td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projectionb</td>
<td>824 44</td>
<td></td>
<td>453 68</td>
<td>210 32</td>
</tr>
<tr>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projectionb</td>
<td>799 39</td>
<td></td>
<td>444 68</td>
<td>204 32</td>
</tr>
</tbody>
</table>

*Estimated data
bIntermediate alternative

A related problem is the institutional emphasis on the role of part-time faculty in the quality of the instruction. The amount and kind of input from part-time faculty in the instructional program and the subsequent evaluation of their results has come under much attention, without a consistent conclusion.

The second reason for utilizing part-time faculty is more often the case and the cause of the concern: part-timers cost the university a great deal less than full-time faculty, and their employment causes relatively few problems in long-term planning. Since institutional budgets will in all probability continue to be stringent, and enrollments will fluctuate (Leslie, Kellams, & Gunn 1982), the use of part-time faculty is highly likely to become an even more prominent feature of higher education.

The exact dimensions of the problems associated with part-time faculty are framed by many caveats. Determining the workload of part-timers is difficult because there is no consistent delineation between part- and full-time status. One estimate puts the number of part-timers at 206,000; the same study numbers full-timers at 441,000 (NCES, 1982 in U.S. Bureau of the Census, Statistical Abstract: 1986). This study and others also show that the number of part-timers is increasing while full-timers are decreasing.

By no calculation do part-timers perform half the teaching, as their numbers might indicate. Again, the actual load carried by part-timers is difficult to determine, but one estimate puts the load at about 15% (Gappa, 1984). It is not presumptive to assume that they do not have a proportionate say in instructional and programs matters.

Both full- and part-time faculty are concerned over how much say part-timers should have in the content of their courses and in the overall curriculum. This tension adds to the feelings of isolation felt by part-time faculty members (Townsend, 1986). If indeed part-timers are expert practitioners, then the argument holds that they have much to offer and should have a large say. On the other hand, they are often not experienced with incorporation of pragmatic issues into theoretical frameworks nor at putting contemporary action into historical perspective. This limits their ability to design and evaluate curricula.

In addition to concern over academic and instructional matters, there is concern over the extent of influence of the part-timer in governance of the institutions, their numbers on committees, and so forth. Even if some institutional ratio for representation can be established, there still exist the legal questions on the part-time faculty role in terms of collective bargaining and their rights to contract procedures granted to full-timers under the property laws (Gappa, 1984). Additionally, there is some evidence that evaluation of part-timers is conducted in dramatically different ways from that of full-time faculty members, perhaps because often the student evaluation is the only factor used.

The procedural issues do not stop at the contract level but have influence at levels that affect institutional viability. For example, the number of faculty slots allotted to an institution, and to a department, is
usually calculated on student demand. These demands fluctuate. Even when enrollments are increased sufficiently and consistently so that new faculty slots can be requested, the time-lapse between request and the filling of the slot is too great to meet demand (Leslie et al., 1982). On the system level, the number of part-time faculty is restricted in some states, and in states such as California the salaries of part-timers and full-timers are set legislatively at differing levels. Finally, funding, in many states, has a link to the ratio of full- to part-time faculties. This ratio is of interest to the accreditation review process (Gappa, 1984).

In summary, part-time faculty are employed by institutions for a number of reasons. For some faculty it is a matter of choice; for others it is a necessary holding pattern for future employment. The number of part-timers will assuredly increase unless some dramatic restructuring of position allocation is developed. Regardless, there will always be part-time faculty who will bring to institutions certain legal and ethical problems, problems that will continue to influence institutional policies and procedures.

Evaluation and Academic Freedom

The development of the tenure system and the tradition of academic freedom, originally seen as faculty's sole protection against punishment for the exercise of the inquiring mind, have largely been replaced by developments in due process and common law (Olswang & Lee, 1984). However, increased fiscal stress and the call for greater accountability are seen by many as possible constraints resulting in post-tenure evaluation (Licata, 1986) and, in some interpretations, constraints on academic freedom (Olswang & Lee, 1984).

Part of the problem tailgates on the trends nationally, and in higher education in particular, for increased accountability. Faculty are not at such liberty as they once were to develop projects and conduct research. Many funding agencies, state and federal, want more efficient and effective use of their dollars than certain types of research can guarantee. And some political considerations are seen as interfering with faculty choice in research.

The conflict in goals of institutions and those of the freedom of the independent scholar will only become more complicated during the late 1980s and early 1990s. Many researchers and observers of this situation are concerned that without planning, the conflicts may be handled in ways that will lower morale and heighten hostility among the "estates," making institutions less functional as they respond to internal and external stresses (Olswang & Lee, 1984).

As faculty have traditionally expected freedom in research, they have also regarded themselves as gatekeepers of the profession. They have operated on the extended guild model even to this day, training, certifying, and hiring their members (Grace, 1984). It is the faculty who have set the criteria for promotion and tenure and who utilize peer review in judgment of a member's achievement as a teacher and researcher. Now the increased interest from the state and other outsiders in faculty welfare and productivity has increased.
the dimensions of the issue of faculty evaluation and accountability. Among the more complicated of the areas are faculty workload (Yuker, 1984) and post-tenure review (Licata, 1986).

The existing fiscal stress suffered by most institutions has caused re-examination of faculty workloads. With enrollments and funding power turning downward, faculty employment is shifting to the buyer's market. "Given decreased mobility and rewards, it is likely that those faculty [already tenured] will remain in education at their institutions for another 20 to 30 years" (Brookes & German, 1983, p. 34). Student demand for certain programs has diminished, and faculty are frequently asked, or required, to cover wider areas, some of these requiring retraining. While the courts have generally affirmed an institution's authority to require faculty to perform assigned tasks internally, lack of say in determining workload is thought by many to compromise faculty freedom. Regardless, with the shift to institutional prerogatives over faculty choice, morale is likely to be extremely low (Olswang & Lee, 1984).

It has long been argued that tenure works against excellence in teaching and research. While probationary faculty undergo mandated periodic review, there are few institutions where evaluation of tenured faculty's adherence to the standards required to receive tenure is conducted (Chait & Ford, 1983). While the issue of who is to do this post-tenure review is in itself controversial, its current link with retrenchment presents a situation with little procedural or legal precedent. Other professionals are finding that our litigation-hungry society is intruding upon traditional professional disciplinary practices. Periodic review of all faculty by their peers would probably be an acceptable compromise between the increasing decline in the awarding of tenure and the intrusion of the external reviewer (Bennett & Chater, 1984). It is yet to be seen if faculty will be able to continue to be their own and sole sentinels.

Management and Planning

Administrators and faculty in institutions of higher education are experiencing increasing stress from both internal and external sources. The nature of the student body, so vastly different from that with which most have had experience, has provided the opportunity and indeed the necessity for these leaders to reassess mission and role as well as instructional and learning environments. Faculty issues are more difficult to resolve within traditional procedures. Increased demand for accountability from the state and federal government and decreased fiscal resources have also brought forth examination of traditional means and measures of efficiency and effectiveness. When the faculty and administrators are not preoccupied with enhancing student learning and development, they must turn their attention to the vertical struggles with the state and federal agencies that have become a part of everyday management, planning, and decision-making at colleges and universities (Mortimer, 1978).
Evaluation of Mission

It is of use to remind ourselves that the conflicts over mission and role exist not only among institutions within states but among the levels of the hierarchy of higher education: the research university, the comprehensive institution, and the two-year college all do some of each other's work. In most cases, gentlemen's agreements and state board actions can accommodate the parameters of the debates. As competition for students increases, there is little indication that institutions will not continue to step into each other's territories.

Accountability

In recent studies of blue-ribbon commissions, which are state-level devices for examining higher education, the researchers found that issues of mission occupied a notable portion of commission recommendations across the states (DiBlasio, 1986; Grace, 1986; Johnson & Marcus, 1986). It is the states' perceptions then that institutions have failed to define and carry out their legislative missions. The states' interest comes at a time of increased external scrutiny, when the states are demanding of institutions more efficient use of resources given them.

Additionally, states have increased their demand for measures of this efficiency. Not only is there increasing interest in how funds are used, but there is also increased inquiry into how institutions define the excellence of the product they produce. In addition to the concern for how faculty spend their time, as discussed earlier, much attention is being focused on student competency and student development (Garland, 1985; Whitman, Spendlove, & Clark, 1984).

Several states are now requiring or at least experimenting with competence testing, be it "rising junior" exams or demonstrated writing proficiency before graduation can occur. These intrusions are the state's extension of its role in commerce and certain public welfare roles where entering professionals are required to pass licensing examinations before undertaking the practice of that profession in the state. There is increasing emphasis on competency at graduation, competency that reflects intellectual development that can be measured by some standard.

For a long time, administrators have measured institutional effectiveness by student outcomes measures: job placement rates, retention and graduation rates, alumni ratings, and long-term outcomes of students (El-Khawas, 1986). The numerous quality rankings of institutions, all but a few focusing only on prestigious research universities, use faculty research productivity as an almost sole criteria for measuring excellence (Conrad & Wilson, 1985; Webster, 1981). Other measures are used by various other agencies and associations, but most variables describe outcomes measures. There is a movement to address process as a measure, but it has yet to gain popularity or understanding with either outsiders or the academic community (Astin, 1985). It is logical, then, to see that although states are searching for effective measures of institutional productivity, there is some difficulty in identifying measures. This problem has gained much attention of late. It is yet to be resolved
whether institutions will be able to devise sufficient evaluation programs that will demonstrate to state and other funding agencies that productivity is high and quality is being obtained through effective use of resources.

These increased demands for accountability and excellence have emphasized the need for institutions to engage more seriously in planning. The need for creative fiscal planning and management has always been a high priority but now appears to have changed its focus: many institutions find they are no longer concerned with increasing their budgets, but are simply trying to retain the previous funding level. In a recent ACE survey, 12% of the public institutions surveyed reported a decrease in their overall budget (El-Khawas, 1986). This trend when considered with decreased federal support, especially student financial aid, and increased costs of instruction and research has set the agendas of administrative calendars for some time to come.

New Students, New Faculty

The changing nature of the student body has also brought pressure on the planning of institutions. Nontraditional students taking new programs using nontraditional schedules have caused institutions to restructure whole programs to meet the demand. While the demand is immediate, the ability of institutions to respond quickly is hampered by traditional processes and policies. Many changes in curriculum and instructional materials, for example, cannot be made without higher level approval, a process requiring far too much time for a service organization.

New faculty should be hired to teach the new students in the new programs. In fact, there are few new faculty slots available in most institutions. The faculty continue to gray at a rate that alarms both retirement planners and faculty chairs (Brookes & German, 1983). Institutions seek creative ways to staff popular programs that have not been officially blessed with increased resources. The use of part-timers may solve immediate needs, and utilizing contractual faculty may delay decisions to restructure faculty tenure systems, but personnel problems may develop. A faculty may be split philosophically by differing legal and traditional workload evaluation criteria. Yet, the use of part-time and contractual faculty seems inevitable as a response to fluctuating fiscal support and changing demographics. Of all institutions, 80% report using contractual arrangements for faculty currently (El-Khawas, 1986). These faculty usually have very different expectations of continuation of employment than do tenured faculty. Administrators have become personnel experts in staffing the faculty.

Infrastructures

One of the most neglected areas of responsibility for administrators is the physical plant that houses the learning academy. Deferred maintenance and capital construction continue to rank very low in budget monies allocated by states. It is the safety and instructional standards that concern administrators for the most part, but it is the esthetics that bother the development director who must answer to disappointed graduates and prospective students.
In *Crumbling Academe* (1984), Harvey Kaiser estimates that capital facilities would require a $78.6 billion dollar investment by colleges and universities just to bring them up to current construction standards; the average cost for a research university would be $70.4 million. This valuable investment of dollars in higher education is generally ignored by governing boards and state legislatures. Procedures for dealing with capital matters are often complicated and archaic. Most states still require university requests for construction to be reviewed in the same manner as the requests for prisons and parks, a system which does not support response to changing technology and student demand. Meanwhile, accreditation and high-technology programs are threatened by institutions' inability to guarantee appropriate physical facilities.

**Support**

Outside challenges also concern administrators. The slowing economy means less employment for graduates and less money for research and from donors. Relationships with federal and state agencies are not viewed as positively as they were at one time (El-Khawas, 1986). Efforts to reduce the federal budget are seen as threatening to student financial aid and to developing institutions. Increased accountability and diminished resources have made the state-institution relationship less mutual.

Administrators have had to develop creative approaches to financing the efforts of their institutions, activities costly in time and resources. In the meantime, traditional demands remain. Accreditation visits fill administrators' calendars. The need to be active in the political arena occupies much of the time that is left. Faculty, staff, and students demand more attention and time in the decision-making arena. The struggles among the horizontal estates distract from the vertical contests. Administrators find it difficult to have enough time to decide on the priorities for their institutions.

**Leadership**

Administrators face critical management and planning tasks in the future. The traditional route to administration through the faculty discipline will be less likely than the formal training in management, especially business. Entrepreneurial skills will be among those most sought, and successful administrators will be able to wear many hats (Cope, 1981).

Much has been written on leadership and its use in organizations and in higher education. Certainly, the role has taken on dimensions never imagined at the University at Bologna. The trend of skepticism toward institutions of higher education and the intrusion into the ivory tower have challenged the skills of even the greatest of academic leaders. Presidents have shorter and shorter tenures in office (Trow, 1985). Academic administrative positions go not necessarily to disciplined faculty but to persons trained in business organization theory and higher education administration (Fife, 1986).

Demonstration to benefactors and believers that institutions of higher education continue to be both servant to and leader in society will no longer be a luxury but a survival skill.
Program Characteristics

The national-level calls for quality have focused particular attention on what programs and courses students are taking in college. Many of the recommendations from the national-level study groups have suggested reform of the curriculum, returning to an emphasis on a core curriculum which has as its basis the liberal arts. Changes in student demand and in the technology of instruction have made a return difficult at best.

Student Demand

Students are attending college with an eye to attaining occupational skills. They take those programs which tend to guarantee higher paying jobs: business, computer science, the techs, and pre-professional curricula like law and medicine. In 1977, Astin reported that careers in business, homemaking, and college teaching showed the most gains in student undergraduate choices. Loss was substantial for careers in engineering, school teaching, and medical and scientific research. In 1983, computer science and business showed increases while education and the social sciences showed decreases in number of degrees granted (NCES, 1986, in U.S. Bureau of the Census, Statistical Abstract: 1986). The curricula with the less proportion of liberal arts are more popular with students.

Although the nature of the general education requirement of curricula is still widely discussed, there is less interest in increasing program requirements (El-Khawas, 1986). However, almost 60% of institutions surveyed by ACE report that they are considering changes in their academic programs.

The disparity between student demand and the direction of curricula reform will no doubt strengthen a long-term trend of student demand for relevance.

Technology of Instruction

Educational delivery systems will be affected in numerous ways over the next decade. Some changes are trend-related; some are part of the evolving technology of instruction.

The changing nature of the student body will cause shifts in delivery of educational material. The trend toward part-time attendance will cause institutions to expand the instructional day either by scheduling more programs in the evening and on weekends or by providing self-paced instruction for parts of programs (Johnson, 1984). There are implications for management, staffing, and quality control when the traditional instructional block is altered.

The new and expanding technology will provide alternative methods of instruction. TV, radio, and newspaper courses have been utilized for some time. Now links by home telephone with lectures and computers can enable a student to participate in the information exchange on entirely different levels than before. Additionally, more students are entering college with
sophisticated computer skills, causing curricula to be updated and advanced and instructional methods radicalized. The implications for fiscal support of Computer Assisted Instruction (CAI) and for faculty retraining are great (Weathersby & Tarrele, 1980).

While institutions are not generally structured legally or pragmatically to respond quickly to these changes, private and corporate education programs are (Johnson, 1984). They have no long and involved procedures for ordering computers on bid nor any faculty committees to approve updated course content. Their response time can bring programs closer to the cutting edge and to student demand. In addition, business and industry have opted for home-grown education for their employees (Morse, 1984).

One study estimates the amount of effort toward employee training and education to have been in excess of $30 billion in 1980 (Morse, 1984). This figure is half of what is spent in traditional higher education in the same year. While certain training must remain on-the-job, there is an obvious market for much of the training and education of American workers. That business and industry have chosen to seek this training in other than traditional situations or have created their own colleges is not an endorsement of American higher education.

Much of this seemingly specialized educational experience is pragmatic and therefore restrained by traditional theory and general education prerequisites. But a significant number of older learners, and high school youth who are without job skills, see corporate education and that provided by proprietary schools as meeting some very real needs. This meeting of student expectations and needs will no doubt continue to help expand the share of the higher education market taken by these nontraditional systems. Administrators of colleges and universities are reconsidering whether they wish to market their institutions toward this mission. If not, the trend toward corporate college and proprietary school education will continue.

Conclusion

Many trends must be considered when planning for the future for higher education in the next decade. There is general agreement that the college, the student, and the curriculum as we have known them are changing. It is hoped that the change is evolutionary, that no revolution will be necessary. Evolutionary change means that we will be able to use the new technologies to enhance instruction, to provide students with occupational and liberal arts skills, and to staff our institutions with the best faculty. Also we must develop better methods of assessment of what we do in institutions of higher education, in order to manage and plan for the future of institutions and society as well as we have in the past. Riding on the crest of the tidal wave may be stressful, but only from up there can we get the proper perspective on what needs to be done in higher education in the 1980s and 1990s.
References


