## **Does High School Grade Inflation Mask a More Alarming Trend?**

This year's survey of freshmen entering college\* shows that their high school grades are higher than ever, but there is also at least indirect evidence that competence in basic academic skills is on the decline. The survey, which reflects freshman attitudes and expectations on a wide range of subjects, has been conducted every year since 1966 and is now sufficiently "longitudinal" to allow identification of some longer term trends.

It is hardly news that, as the survey shows, more students with aptitude in science are opting for college preparation leading to careers in professions such as medicine and engineering. But in addition to this responsiveness to the "market," there are indications that freshman choices are being influenced by an erosion in academic ability.

The survey reveals that the high school grades for this year's college freshmen are higher than for any previous entering class. Commenting on this evidence of grade inflation, the director of the survey, UCLA professor Alexander W. Astin, says that "When these grades are considered in the light of declining scores on college admission tests, it seems clear that these secondary schools' grading standards have been steadily declining since the late 1960's." Astin's views are reinforced by the answers of the freshmen in question, of whom 63.7 percent agreed with the statement in the survey that grading in high school has become easier. This was up from 61.0 last year and 57.7 percent the year before.

Astin says it is possible to "connect the decline of test scores with the popularity of certain fields." He notes that the "physical sciences are demanding in terms of mathematical ability" and the "humanities in terms of verbal ability." And he sees that as "an indirect consequence of 'declining' test scores, students are opting for fields less demanding of basic academic skills."

The survey does not correlate test scores directly with choices of majors or career preferences, but there would appear to be signs of a relation between the slump in academic skills and the recent rapid rise of interest among freshmen in majoring in business. The suggestion is that part of the appeal of business courses is that by and large they do not emphasize proficiency in standard academic skills to the same extent as other fields.

There is some further support for this reasoning in survey data, showing very clearly that the increase in interest in business is greatest in the least selective schools and lowest in the most selective schools in which test results are, in general, the highest.

The current trend to vocationalism in higher education and the relative attractiveness of a business degree in a very competitive job market cannot, of course, be discounted. And competence in conventional academic skills does not by any means guarantee success in business or in life. But high test scores have been requisites for admission to training for the more lucrative professions and fairly reliable guides to success in that training.

The 1978 survey is based on returns from 187,603 freshmen at 383 representative institutions. The freshman survey is part of the so-called Cooperative Institutional Research Program intended to assess the effects of college on students and includes a range of normative questions on social and political issues as well as on students' academic and career interests.

Among technical fields, the survey has consistently shown that engineering is the most volatile. This year some 10.3 percent of freshmen indicated they would major in engineering. Last year it was 9.3 percent and the year before that 8.5 percent. The percentage in 1966, the first year of the survey, was 9.8 when the space program and science in general were booming. The low point came in 1973 and 1974 when a decline in interest bottomed out at 6.6 percent for those 2 years.

The most decided bear market has been in mathematics. In 1966, about 4.5 percent of freshmen chose math and statistics as majors. By 1976 it was down to 1 percent. Last year it was 0.8 percent, and this year the percentage rose marginally to 0.9. A very similar pattern applies to English majors who accounted for 4.4

## College freshmen data bear witness

percent in 1966 and 1 percent last year.

In the natural sciences, detailed comparisons are difficult because of changes in survey categories during the past decade. Nevertheless, it appears that interest in biology, chemistry, and physics has remained fairly stable during the 1970's. In 1966, those intending to major in the physical sciences amounted to 3.3 percent. This year the percentage was 2.4, down a tenth of a percentage point in each of the previous years. Astin also notes that there appears to be a constant traffic between engineering and the physical sciences, with the former tending to rise when the other declines and vice versa.

In respect to the progress of women in the era of the women's movement, the results seemed to be mixed. The percentage of women intending careers in medicine has risen from 1.7 percent in 1966 to 3.4 percent this year. On the other hand, there has actually been a slight decline in the percentage of women interested in careers as research scientists. Despite affirmative action programs in universities and industry, the percentage of women interested in such careers declined from 1.9 in 1966 to 1.7 this year. For men, the percentages were 4.9 percent in 1966 and 2.7 percent this year.

Astin suggests that a major determinant of women's decisions to go into science is mathematical ability. The decline in basic academic skills, therefore, may be taking its toll here too. Another factor may be the steady increase in percentage of women high school graduates going to college so that the group adequately prepared to study science may constitute a smaller percentage.

To Astin the message of academic decline in the secondary schools is essentially one for the postsecondary institutions. He sees a tendency among those in higher education to wring their hands and lament the trend. "But they set the standards and train the people," says Astin. And they must take responsibility if the programs in the high schools are going to be improved.

He sees the problem as fundamentally a product of the low prestige of education in the colleges and universities, of the "denigration of teaching." And now, says Astin, "the chickens are coming home to roost."—JOHN WALSH

<sup>\*</sup>The American Freshman: National Norms for Fall 1978, Alexander W. Astin, Margo R. King, Gerald T. Richardson. Available from the Cooperative Institutional Research Program, Graduate School of Education, University of California, Los Angeles 90024.