

figured out how to halt the upward trend. At many selective colleges and universities, A grades (A+, A, A-) now account for half or more of the grades given in undergraduate courses.

But the reader may say: Students are better prepared for college than ever before, and the competition for spots in top schools grows more intense every year. With institutions enjoying the luxury of choosing among an outstanding pool of high school students with high grades and board scores, why should anyone be concerned that such talented students are earning higher and higher grades once they get to college? In the world of Lake Wobegone, where everyone is above average, why not simply let grades continue to rise?

The reason is that grade inflation makes it difficult to differentiate first-rate work from good or even ordinary work, and that poses problems both for our capacity to educate our students and for our ability to communicate their strengths to the outside world.

Grading, after all, is an educational tool. Done properly, it helps students to evaluate what they have learned, how well they have learned it, and where they need to invest additional effort. If not done properly (with careful calibration and discrimination), it is uninformative and therefore not useful; at worst, it encourages students to get by in their courses with something short of their best efforts.

We owe our students a fair and reasonable assessment of the work they have done; reward should be well matched to performance. Students should earn high grades when they perform at a level that merits high grades. But even the best students do not do their best work on every assignment or in every course, and they should not

get the same grades for their best work as they do for work that is good or even ordinary. And if our students really are better prepared than ever before, we should be trying to stretch them more than ever before, holding them to higher expectations to help them get the most from their educations.

We also owe the outside world clear information about how we evaluate our students so that grades can be understood in context. If all of our students' transcripts look more or less the same, academic records will become less informative, and employers and graduate and professional schools will look for other ways of distinguishing among applicants.

In recent years, colleges and universities have begun to take steps to address these challenges. In the mid-1990s, Columbia and Dartmouth added contextual information to their transcripts to show how the grades of individual students compared to those of others in the same courses. While this provides better guidance to recipients of transcripts, it has not affected faculty grading patterns. In the early 2000s, Harvard changed the numerical equivalencies of its letter grades and capped the percentage of honors that could be awarded, again, however,

without affecting faculty grading patterns. In April 2004, the Wellesley faculty agreed that the average grade in 100- and 200-level courses should be no higher than B+. That same month, the Princeton faculty adopted a common grading standard for every academic department and program, with the expectation that A's should account for less than 35 percent of the grades given in undergraduate courses in each academic unit, a return to historical grading patterns at Princeton from the early 1970s through the early 1990s. While it is too soon to declare victory or to describe a sure-fire solution, it would be highly desirable for all selective institutions to take up the challenge of finding ways in their own contexts to make grading a more effective educational tool.

Nancy Weiss Malkiel is professor of history and dean of The College at Princeton University

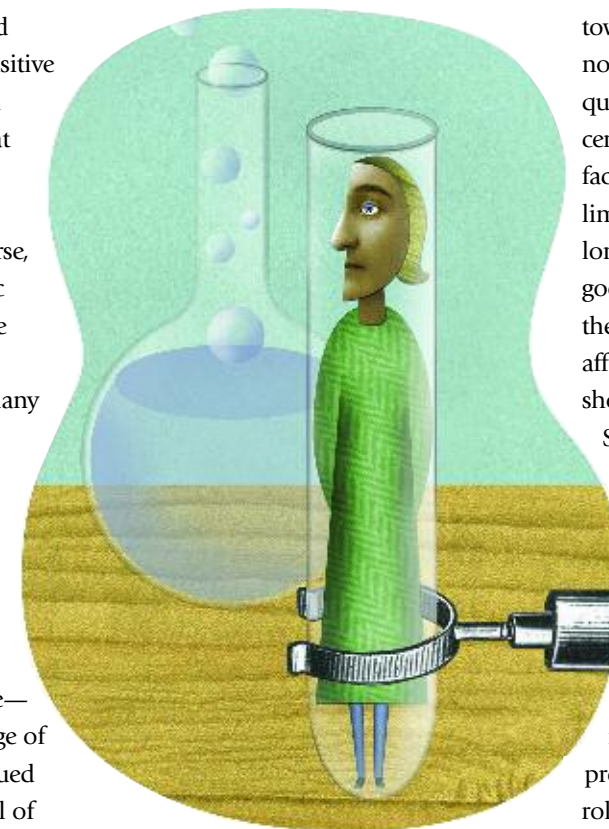
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III. Women in science: and other questions

With the recent flap around Harvard President Lawrence Summers' insensitive and wrongheaded comments about women in science, it is apparent that being a woman in science is still an uphill battle. There remains a huge amount of sexism to overcome; worse, the male-created culture of scientific pursuit still makes demands that are wildly out of kilter with both the biological and personal priorities many women wish to pursue. This leads scientifically-capable young women to ask, "Why bother?"

I submit that the Academy, if it wishes to motivate more women to undertake and persist in scientific careers, must first re-examine the very heart of the scientific enterprise—the idea that the quest for knowledge of our world must be relentlessly pursued according to a single-minded model of work. This re-examination must begin with the way we present scientific discovery to young students in high school and college. Modern science is increasingly a collaborative effort. It ought to be ideal for someone who wants to participate on a flexible schedule or a part-time basis. Yet most of our teaching focuses on the hagiography of individual science, the lone genius as opposed to the team.

Second, we need to reimagine graduate study in order to change the culture of science to accommodate those, both male and female, who want to pursue it on a truly flexible schedule throughout their childbearing years. If science is really a group enterprise, why is the doctoral dissertation still an individual pursuit? Why can't graduate students work in teams, documenting



each person's contribution to the output, and defend their work as a group? Why couldn't a postdoctoral researcher work a 20-hour week while caring for a baby? Sure, the rate of publication might be lower, but that individual still could make significant hands-on contributions to the work, and her or his intellectual contribution to experimental design, data analysis, and discussion is much easier to schedule around real life. Why should the number of years taken to complete a PhD or a postdoc matter, compared to the quality of the output?

Third, we need to restructure the professoriate to reward good work, regardless of its pace. Tenure, in this day and age, is an anachronism. Instead of making it something one must rush

toward to the exclusion of all else, why not make tenure the reward for a certain quality of achievement but *not* in a certain time period? Why shouldn't all faculty have the option of working on limited-term, renewable contracts for as long as they can continue to produce good work, and go for tenure only when their lives are at a point where they can afford the time? For that matter, why should tenure continue to exist at all?

Science requires time; why not five-, seven-, or 10-year renewable contracts? Why shouldn't an academic appointment be made as part of a group? Why couldn't a group of collaborating scientists apply together to an institution, each member teaching and doing research so that the collaboration is productive even as individuals shift their roles over time?

We need to challenge the social structure of how science is done to match the needs of that large fraction of the population that is interested in having a life outside of, as well as inside, science. Only then will a science career look like a good bet for women—and for many more men.

Gail Simmons, PhD, TCNJ's first dean of its School of Science, is now dean of the Division of Science and Technology at CCNY's College of Staten Island.

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IV. Liberal education under stress

"In each age education must take into account the conditions of that age. But the educated mind is not a mere creature of its own time. Education is emancipation from herd opinion, self-mastery, capacity for self-criticism, suspended judgment...."

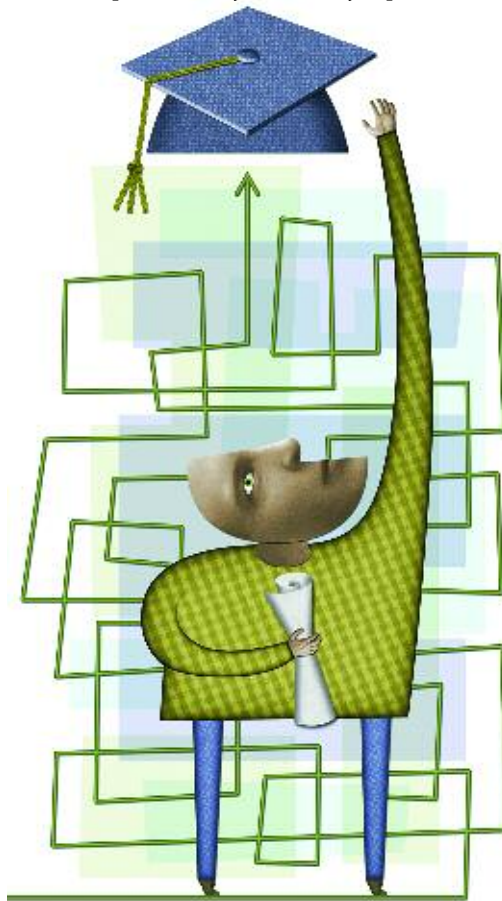
Everett Dean Martin

Liberal education is more than education in the liberal arts. While this "more" may be difficult to define with precision, it is widely held to consist of something higher and nobler than might be indicated by the sum of its parts. These higher aspects of liberal learning appear to be at odds with the "presentism" of the age. Yet they are precisely what is demanded by our times and by our natures as human beings.

This higher view originated with the Socratic dictum to "know thyself." However, examining oneself presents a peculiar problem. Original thought being rare, it follows that much of what

is believed in any society must be essentially derivative, handed down by others. The "unexamined life" then, is a life lived in ignorance of the true worth of one's opinions, which is to say, in ignorance of the arguments that would make it possible to rationally embrace or reject them.

The most practical way to get at opinions is to examine them through the arguments that were used to defeat the opinions they eventually replaced.



What is needed is exactly what has been left behind: a well-articulated, mandatory, systematic course structure focusing more on student needs than on student preferences.

by Jeffrey D. Wallin

Doing so immediately takes us beyond the present. Consequently, the pursuit of self-knowledge clearly requires assumptions not in accord with a focus on the present. One is that it is possible to compare ideas from different eras and reasonably conclude that some are more compelling than others. Presentism undermines this assumption. It devalues the possibility that truth may be other than what it appears to be today.

In the *Nicomachean Ethics*, Aristotle contended that cultivating a specific skill, such as aiming an arrow on a windy day, often must be done indirectly. The wind, gravity, and other forces must be taken into account if the arrow is to hit the target. One must, in effect, lean against one's inclination to shoot straight. Using this analogy, personal inclinations are to the skills as wind is to the archer. What then, can be said is the "wind" that must be resisted to better enable us "to hit" the truth of things? Again, one of the strongest is the "presentism" that characterizes our time.

Not only is the truth often hidden behind the fog of received opinion, even the inclination to search for it can be displaced by the tendency to see everything in present terms. The great questions of liberal education, of what being human is all about, can only be illuminated by treating present opinion as just that – opinion. Only by believing the truth of the matter could lie outside one's immediate view, can the search for it be compelling. If the "educated mind" need only be a "mere creature of its own time" then there can be no good reason to search for it elsewhere.

This inattention to the past is especially pertinent now, given the current attention to "globalization." Business and political leaders the world

over have made it clear that an untutored focus on the present is unlikely to produce the kind of individuals needed to cope with our times. Globalization puts a premium on the ability to cope with rapid and unanticipated changes of company focus; with dislocations caused by changes in ownership, and with shifts in products or services over time. Traditionally, the disposition or ability to live with unresolved dilemmas and unanswered questions, to easily adapt to different cultures, and to take career changes in stride were expected to be supplied by the mandatory undergraduate core curriculum, with its aim of producing well-rounded persons. Hence it ought to come as no surprise that mandatory core courses are being added at historically high rates by universities all around the world.

Yet it is precisely the core curriculum that has been abandoned in most colleges and universities in our own country, to be replaced with, at best, a more or less open-ended series of choices, sometimes amounting to several thousand courses. What is needed is exactly what has been left behind: a well-articulated, mandatory, systematic course structure focusing more on student needs than on student preferences. With the rest of the world starting down this path, perhaps it is time to reconsider the considerable strengths of the core for the demanding new age we are in.

Jeffrey D. Wallin, PhD, is president of the American Academy for Liberal Education, an organization devoted to improving the core curriculum of colleges and secondary schools.

by MaryAnn Baenninger



V. Perspective and the professors

As I was writing this essay, I was also scrambling to write a notice to our campus community about preparations to help students displaced by Hurricane Katrina. I'm president of a liberal arts college that offers only a few professional programs. Our students are not preparing for specific careers, but rather for "lifelong learning." I wouldn't have it any other way. As a consequence, most of our faculty members have spent most or all of their careers in academe. They are not unlike faculty members at The College of New Jersey. I know this because, in the not-so-distant past, I was a professor there.

I hastily completed the hurricane aid announcement, because I wanted to reach as many people as possible as quickly as possible. The first response was from a faculty member who didn't mention our efforts to help displaced students, but made much of a small typo in the body of the message! Various unpresidential retorts ran through my mind, but I responded as I have learned to respond in these situations—I ignored him.

But I asked myself whether this lack of perspective was pervasive among faculty members and whether it was unique to my institution. I also asked myself whether we can preserve the integrity of our disciplines and whatever body of knowledge we each hold dear, while staying in touch with today's world and modeling openness and a sense of perspective for our students. Administrators and most of their faculty colleagues will tell you that there are proofreaders (and other "Ivory Tower" types) at

every institution. I even admit to times when, as a faculty member, I argued a position under the banner of technicality, grammar, semantics, process, or protocol, while the serious issue at hand was left to languish for days, weeks, or months.

The old model was that college was an incubator or cocoon. The goal was to prepare students for and protect them from the real world that they would experience after college. The ideal was perfection in the products produced, and preservation of an environment where faculty could think important thoughts and make arguments on principle without societal distractions.

But the Ivory Tower has toppled. It isn't that the substance of what we learned and thought within its walls is no longer meaningful in today's world, but rather that it can't be kept pure, static, or isolated. And it can't be protected from typos—at least figuratively.

Those of us who educate students must face the reality that knowledge is created, disseminated, communicated, digested, and synthesized differently than in the past, and we need to rethink our priorities, our urgencies. We also recognize the value of applying our knowledge in areas like undergraduate research and community-based research. TCNJ's faculty recently transformed the curriculum to better prepare students for today's world, taking into account the changes above. Faculty members at my own institution are embarking on a

similar initiative. We began a two-day workshop on our common curriculum with a speaker who reminded us that the curriculum and the approach to learning we offer our students now will need to serve them in a very different world even four years hence when our newest students graduate. This will require responsiveness, openness, flexibility, and a sense of perspective beyond what has previously been needed from faculty members.

The majority of faculty colleagues who responded to my campus message didn't even notice the typo. They e-mailed to offer places for students to live, pledges to increase the size of classes if necessary, and a willingness to be flexible and supportive to students who already had missed a week of class. They responded by posting notices on the message boards of their respective disciplinary societies, and by putting us in touch with students they thought we could help. Some of their e-mails had typos in them, and I didn't care. Part of their role is to help their students know when orthography and other academic virtues matter (and they usually do, I'll admit) and when they are incidental to the more important goal.

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VI. Financial issues stall state education

With strained enrollment capacity at the nine state colleges and universities and perennial state budgetary problems, New Jersey typifies a national phenomenon that higher education expert Jane Wellman calls "the double whammy." In a nutshell, she refers to the convergence of high college demand and reduced state aid to higher education.

New Jersey already trails 44 states in the number of four-year public college/university seats per 1,000 residents. Demand for affordable college education exceeding supply is worrisome to citizens as well as educators, polls the New Jersey Association of State Colleges and Universities (NJASCU) has sponsored since 1999 show.

By 2008 through 2018, New Jersey will have over 100,000 high school graduates annually, up from 80–90,000 in the last decade. More than ever they will aspire to college and more of them will need help paying the costs.

For the state, this is a challenge to significantly grow our higher education capabilities and simultaneously to meet urgent professional workforce demands. However, some basic questions must be answered.

Who gets to enroll at state colleges and universities? Approximately 21,000 students per year seek admission as first-time, full-time freshmen at state colleges

and universities. Over 9,000 students are admitted, but thousands more are turned away. How will their needs be met? While high demand helps institutions build a diverse student body, it does nothing for those not admitted, leading to other thorny policy questions.

What shall we do about those we cannot expect to serve? Should we recommend that many students seeking a four-year residential experience at a public institution in New Jersey change their expectations and opt to attend a community college, a New Jersey independent college or university, or an out-of-state institution? Attempts to create policy that steers students to institutions with room may fail by underestimating student market forces. Giving too few choices to students here could worsen New Jersey's already lamentable position as the nation's number one net exporter of college-bound high school graduates.

If we choose to expand capacity, how will we do it? Will we just make more space at those state colleges and universities that want to grow and have the land to do so? Will we seek ways to compress the time to graduation so that more students graduate each year? Will we turn to alternative campus sites and course delivery methods to raise productivity? Moreover, how can we best increase both capacity and quality?

Who will pay? If we increase academic space, programs, and faculties, we will increase annual operating costs, requiring regular revenue. Who will shoulder most of the costs of increasing capacity: the students and their families or all state taxpayers?

Concerning new or expanded facilities, voters seem willing to commit funds to expand. Our July 2005 poll revealed that, by a 4:1 margin, likely voters favor a facilities bond issue to expand and improve education at New Jersey colleges and universities.

What kinds of student aid shall we emphasize? In its Tuition Aid Grants, New Jersey has one of the nation's most generous needs-based aid programs. A new one, NJ STARS, covers community college costs for high-achieving students. The Outstanding Scholar Recruitment Program offers aid that tells high achieving students the Garden State wants them here. Scholarship or

loan forgiveness programs for students entering high-demand fields



have been proposed. Which programs should be strengthened and which should have growth curtailed, keeping in mind the expected growth in the number of low-income students?

Finally: Who sets the agenda for higher education? When it comes to making new investments in higher education, our recent poll found likely voters have confidence in autonomous college and university trustee boards, more so than state government entities.

Some policy makers have thought about revamping higher education governance. However, what truly will matter to citizens is not structure so much as the commitment by the next governor to a vision for higher education. If the commitment is genuine, the vision will be achieved.

Darryl G. Greer, PhD, is executive director of the NJASCU; Paul R. Shelly, is communications director. Members of the Association are: The College of New Jersey, Kean University, Montclair State University, New Jersey City University, Ramapo College of New Jersey, Richard Stockton College of New Jersey, Rowan University, Thomas Edison State College, and William Paterson University.

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