

## How Higher Education Can Produce the Next Generation of Positive Leaders

Since the end of the twentieth century, references to the “knowledge society” and the “information age” have become commonplace, but we are not and never have been a society in which knowledge or information are the only keys to occupational or any other kind of success. Robert Sternberg, dean of the School of Arts and Sciences and professor of psychology at Tufts University, emphasizes that the purpose of university education is not merely to transmit knowledge; rather, it is to teach students how, as leaders of society, to use their knowledge base. Given this purpose, Sternberg suggests that something is missing in the way institutions set goals for shaping and admitting their classes. He notes that many students who prove to be most successful in life are not those who had the best marks and test scores, either in high school or in college, and proposes that colleges and universities adopt a conscious and purposeful focus on selecting and producing the next generation of leaders.

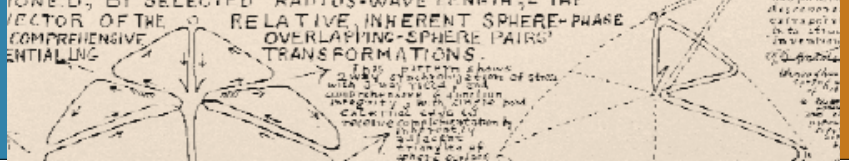
### NOTEBOOK

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The SAT and ACT tests do not tap into creative, practical, and wisdom-based skills and attitudes. To maximize the chances of admitting those most likely to be the best future leaders, the range of criteria for college admissions should be expanded.

Research on tacit knowledge shows that what matters is not *how much* experience one has, but rather *how much one learns* from that experience.

Some might argue that leadership cannot be directly taught. This is probably true. What one can do, though, is create the kinds of experiences that enable students to learn what it means to be a leader.



## The Goal of a College Education

The world's store of knowledge now doubles every few years. The knowledge we acquire in our undergraduate and even graduate courses quickly becomes outdated. Whatever it is we are developing in our students, it cannot merely be a knowledge base. As time goes on, that knowledge base will serve them well for a diminishing number of years. Indeed, the worst thing they can do is get locked into their knowledge as it becomes progressively less relevant. Research has shown that experts often are even more susceptible than novices to becoming entrenched and locked into conventional ways of seeing things, such that they are unable to think flexibly and to get out of the black boxes they create for themselves.

Increasingly, the knowledge we need is stored in vast databases, available online or on CDs. These media are effective ways of storing knowledge; what they cannot do is tell us how to use the knowledge they contain for good ends that make a positive difference in the world. The purpose of university education goes beyond utilizing knowledge to developing the next generation of leaders.

When I speak of leadership, I am thinking of it with a "small l." That is to say, I am not necessarily referring to the leaders of government or the captains of industry. Rather, I am referring to the kind of leadership everyone shows in his or her daily life—in a family, a workplace, a community organization, a civic organization, a common-interest organization, an amateur sports team, a religious group, or perhaps a business, or in government or education. It is the kind of leadership we exert when we persuade our children to do the right thing, or when we ourselves make the right choice in the face of temptations to do otherwise.

Research shows only relatively modest correlations between conventional test scores and life success. Indeed, in a study of gifted children, almost all of whom had stratospheric IQs over 140, the participants proved time and again to be highly successful, but they were not, for the most part, the people who became the top leaders in their fields.

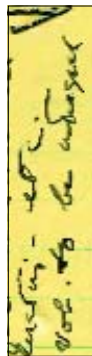
## What Is Leadership?

There are four crucial elements of leadership, all of which are necessary for a person to be a good and effective leader. They are creative, analytical, practical, and wisdom-based

skills and attitudes. Consider each in turn:

The first element is *creative skills and attitudes*. A leader needs a vision—a set of original ideas—of where he or she wants to take those being led. In the absence of a creative vision, someone can be a titular leader, or a manager, but not a true leader. Creative leaders defy the crowd, seeing things in ways that past leaders and experts have been unable or unwilling to envision. One of my favorite university leaders, Kingman Brewster (president of Yale from 1963 to 1977), had a vision of a university fully integrated with society and sensitive to its problems, rather than of the university as an ivory tower isolated unto itself.

The second element is *analytical skills and attitudes*. One has to ask whether one's vision is a good one—is it logical, coherent, sensible, attainable? Many leaders have original ideas that fail simply because they are not good.



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The leader never bothered to ask himself or herself whether the ideas were the right ones to have. Some of the worst political leaders of all time have been creative but have failed to ask themselves where, exactly, their ideas would take their stakeholders. Analytical skills are the ones best measured by conventional tests used to assess college readiness. But these analytical skills are assessed differentially well for various populations: what these tests measure depends largely upon the background and socialization of the students who take the tests.

The third element of leadership is *practical skills and attitudes*. One has to have the know-how to execute one's ideas and the tacit knowledge of how to persuade stakeholders to follow one's ideas. The leader has to move his or her followers in the chosen direction. Though they may have a vision, leaders may fail because they cannot bring others to accept and support it. Kingman Brewster courageously spoke publicly about the university's responsibilities to society, and he was able to convince many stakeholders to go along with him. (As is true for anyone who is creative, however, he did not persuade everyone.)

Finally, the fourth element of leadership is *wisdom-based skills and attitudes*. One needs to use creative and analytical skills, as well as knowledge, for a common good, balancing one's own interests with other people's interests and with larger interests that go beyond individuals. One also needs to foresee the long-term as well as the short-term consequences of one's actions as a leader, and to ensure that the values underlying one's decisions and actions promote the welfare of those for whom one is responsible.

### **Creating Leaders**

The Tufts School of Arts and Sciences is in the process of reinventing itself so as to fulfill the mission of educating the next generation of new leaders for a changing world. We have embarked on a series of interrelated initiatives directed toward this end, based on a theory of leadership known as WICS, for wisdom-intelligence-creativity, synthesized. The initiatives encompass diverse aspects of admitting, developing, and assessing students for the knowledge, skills, and attitudes needed for leadership, and on evaluating these efforts.

#### ***Admissions Initiative***

With regard to admissions, tests such as the SAT and the ACT provide reasonable but partial assessments of analytical skills (for many but not all students). They do not, however, tap into creative, practical, and wisdom-based skills and attitudes. To maximize the chances of admitting those most likely to be the best future leaders, the range of criteria for college admissions should be expanded. In a nationwide project involving 777 students from 13 colleges representing a wide range of student bodies, selectivity levels, and geographic locations—the Rainbow Project—we found that by adding tests of creative and practical skills we could double the accuracy of our prediction of freshman-year grades when compared to the use of SAT alone and, simultaneously, substantially decrease differences in scores among members of different ethnic groups (white American, African American, Latino American, Asian American, and Native American).

Beginning with applications for the class of 2011, we are including in the Tufts-specific application brief essay options designed to assess skills and attitudes more directly relevant to leadership than one would find in traditional college-admissions assessments. The project is called Kaleidoscope. The assessments include essays asking students to write about topics such as (a) what book they unquestionably would like to have on their bookshelf and why (to assess analytical skills), (b) “The End of MTV” or

“The Professor Disappeared” (to assess creativity), (c) how one can convince others of an original idea one has that the others may not immediately accept (to assess practical skills), and (d) how an interest the students have could be turned to the common good (to assess wisdom). In evaluating these essays, the content of the responses per se and their “social correctness” is of less interest than the thinking processes the students reveal in producing the responses.

We now have preliminary results from the first year of the Kaleidoscope Project. The results are very encouraging. First, the total number of applications rose, indicating customer acceptance of our procedure. Second, academic quality of applicants and accepted students went up, as measured by SATs and other measures of academic strength. Third, diversity increased greatly; for example, the number of African-American students in our entering class is almost double the number from the previous year, and numbers of other minorities rose as well. Fourth, students felt that they had a chance to be heard—that ours is a school looking at more than just traditional numbers. These results no doubt reflect many factors, but show that a project such as Kaleidoscope can be done, and with very positive outcomes.

#### ***Instructional Initiative***

As Tufts increases the number of admitted students with diverse styles of learning and thinking, we will need simultaneously to educate our professoriate as to how to reach students with such varied needs. Most professors, including those who are excellent teachers, have never explicitly learned how to reach students who do not learn in traditional ways. Indeed, in graduate school they may have had no instruction whatsoever in how to be effective teachers. As a result, our system of teaching and assessment often casts a fixed spotlight on some (usually small number of) students who are bright in conventional ways, without ever allowing other students to shine.

Tufts has opened the Center for the Enhancement of Learning and Teaching (CELT) to help promote optimal learning and teaching across the university. The center's Fellows program, which enrolls roughly a dozen professors every semester, helps teachers better reach students who learn in a variety of ways—be it through memory, analytically, creatively, practically, or through some combination of skills—based on methods that have been tested in a large number and variety of schools. The goal is to ensure that every student can learn. Professors learn how they can design classroom instruction and assessment to help students analyze, compare and contrast, evaluate, judge, and

critique (analytical learning and thinking); create, invent, design, explore, discover, imagine, and suppose (creative learning and thinking); and apply, utilize, execute, implement, contextualize, and put into practice (practical learning and thinking). Faculty also learn how they can raise questions of wisdom-based values in their teaching, such as how various possible decisions and actions affect the common good over the short and long terms. These teaching techniques have been shown, in studies involving thousands of students across the United States in various subject-matter areas and grade levels, to improve learning outcomes as measured by conventional and unconventional assessments alike. Significantly, teachers have evaluated the first year of the CELT program very highly.

### **Leadership Minor Initiative**

Students go to college to learn to be leaders, but how and when do they learn? We may hope they pick up the tacit knowledge of leadership, but do they? Research on tacit knowledge shows that what matters is not *how much* experience one has, but rather *how much one learns* from that experience. To develop future leaders, we need to offer learning experiences that will create leaders rather than merely hope that such experiences occur.

At Tufts, we are in the process of creating for Fall 2008 a leadership minor—voted on and approved by an overwhelming majority of the Arts, Sciences, and Engineering faculty—that will enable all interested students to learn the skills and attitudes essential to good and effective leadership. The minor will consist of three tiers. The first tier involves courses that directly teach about leadership—theories of leadership, research on leadership, case studies of leadership, and so forth. The second tier involves courses in the entire range of the liberal arts that pertain to leadership but do not directly teach it. Students might learn about leadership through literature (the foibles of Othello or King Lear), philosophy (Plato's or Aristotle's views of leadership), political science (theories of presidential leadership or leadership as it applies in different forms of government), history (studies of successful and failed leaders throughout history), psychology (interactions between persons and situations that lead to successful leadership), sociology (leadership of social movements), anthropology (conceptions of leadership in diverse cultures), the sciences (the interaction between theory and data in scientific advances), and so forth. The third tier involves a substan-

tial leadership experience and a reflective paper that demonstrates how what is learned in the first two academic-oriented tiers can be applied in the third, practical tier.

Some might argue that leadership cannot be directly taught. This is probably true. What we can do, though, is create the kinds of experiences that enable students to learn what it means to be a leader. The goal of a leadership minor is to prepare students to be in the vanguard of new leaders for a changing world.

### **Value-Added Initiative**

Finally, how do we know if it all works? We have designed a project to assess the value added by a Tufts education in terms of the skills and attitudes that comprise leadership. Starting in Fall 2006, incoming students answered a set of questions assessing their creative, analytical, practical, and wisdom-based skills in leadership situations. They will be asked these questions again when they leave Tufts. The question we will investigate, for each successive class, is the extent to which students in various educational programs, including the leadership minor, show gains in leadership skills and positive attitudes relative to students in other programs. The kinds of questions we are asking are similar to those posed in the admissions application referred to above. For example, a student might be asked how he or she would attempt to persuade fellow students that what appears to be a harmless prank actually might cause damage to themselves, their classmates, and the university as a whole.

### **Conclusion**

The goal of a college education is to create the next generation of positive leaders. But we often admit, teach, and assess students as though the goal were to create inert repositories of knowledge. Higher education's leaders can go beyond platitudes and truly create a new generation of informed and active citizens by reinventing college and university admissions criteria and curricula to develop leadership in their students. There is no time like the present for us to be leaders in doing so.

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