The Meaning of the Baccalaureate

What does it mean to get a baccalaureate degree? The author explores current and not-so-current thinking about the purpose and value of the undergraduate degree.

By Margaret A. Miller

When I was on the staff of the State Council of Higher Education for Virginia, a Council member once asked me, "What does it mean to get a baccalaureate degree?" Although I had been overseeing the assessment program in Virginia for almost a decade, I found myself unable to describe the results of a college education. I retreated into historical pronouncements on what a college education does, such as Thomas Jefferson's statement that the purpose of an education was the development of "a knowing head and an honest heart," and the words of Harold Macmillan, who informed students at Oxford that they wouldn't have any useful skills when they graduated but they would know when a person "was talking rot" to them.

What students are learning and the value that a college education brings to society are issues I have been grappling with again in my current role as project director of the National Forum on College-Level Learning. The purpose of this project, a pilot study involving five states (Illinois, Kentucky, Nevada, Oklahoma, and South Carolina), is to fill a major gap in our knowledge about what students are learning. (For more information on the project, go to http://www.people.virginia.edu/~mam5mc/nationalforum.html). Many states have gathered information about student learning from public colleges and universities for purposes of certification, improvement, or accountability. Yet few, if any, have collected comprehensive information from both public and private institutions to address the broader questions: What are students taking away from their college educations, and what are they bringing to their states in terms of intellectual capital? In other words, what do they know and what can they do?

Over the next year, under the auspices of this project, the five states will collect comparable information on the intellectual skills that students acquire in college. Through licensure tests they will determine the readiness of graduates to bring their disciplinary knowledge and skills into the workplace, and through graduate-admission tests they will assess how equipped their students are for advanced study. The literacy levels of college graduates will be signaled by their performance on the National Assessment of Adult Literacy. By administering WorkKeys and the Collegiate Learning Assessment to representative samples of students in the last years of their two- and four-year college educations, respectively, the states will learn how these students are able to apply their critical-thinking, communication, and problem-solving capacities to both academic and workplace-based problems. The National and Community College Surveys of Student Engagement will let the states know whether students are engaging with their college experience in ways that promote deep and lasting learning, while graduates' views on the adequacy of their intellectual skill levels to the tasks of contemporary life will be revealed in their answers to the College Results Survey. In collecting this information, the states aim to determine what kind of educational capital their college-educated residents provide them, as well as how their public and private, two- and four-year institutions collectively contribute to that capital.

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The project faces a host of both political and methodological challenges. For instance, in a time of unprecedented fiscal crisis, states, colleges, and higher education coordinating and governing boards are understandably focused more on survival than on determining how well they are educating students; and although the project has assembled what we think are the best measures available, every one of them has its limitations. College graduates are likely to do their best on high-stakes licensing and graduation examinations, but the people who take those exams do not represent all graduates. Only a limited number of people take the National Assessment of Adult Literacy. Finally, the surveys of college students about their collegiate experiences and of graduates about the skills they bring to real-life situations are only indirect measures of learning.

The most consequential difficulty the project faces, however, is determining what to assess. In a sense, the available instruments drive the answer to that question. The national exams and surveys selected were developed to ferret out information that various policymakers have considered important to know about the intellectual skills and knowledge of the college educated. In other words, each measure used to assess their skills and knowledge is based on implicit assumptions about what those who have been to college *should* know and be able to do. Any examination to assess college graduates' preparedness for further study or work, for instance, is based on assumptions about what skills and knowledge they should have in order to be ready for the next stage of their intellectual development and practice.

So, when we pose the question, "What does it mean to get a baccalaureate degree?" does it mean that we do not understand what a college degree means or that we lack a widely shared sense of the intellectual achievement it signifies? I would argue no—that despite what seems to be a blooming confusion, there is a commonality to our implicit expectations about the intellectual skills we expect college graduates to have, and they include (although are not limited to) the core competencies assessed in the measures the Forum has selected. Moreover, although the characteristics that should be displayed by a college-educated person may have been described in different language in different eras, these expectations have had remarkable staying power over time. We are apt to think of the challenges of this century as unique, calling for novel intellectual tools, but many of them go back at least to the nineteenth century, as do assumptions about the intellectual equipment required to deal with them. These implicit assumptions can shape contemporary attempts to assess what the college educated know and can do.

WHAT SHOULD STUDENTS KNOW?

ASSUMPTIONS ABOUT the intellectual capacities that colleges expected their graduates to have could remain implicit but still be generally understood only as long as a small group of relatively similar institutions were educating a small and more or less homogeneous population of students who brought with them, and built on in college, a shared set of cultural understandings. Now such traditional students—middle- to upper-class eighteen- to twenty-two-year-olds who move directly from high school to full-time attendance at a residential college—constitute less than a quarter of our student bodies.

As our student bodies are changing, our increasing reliance on technologically delivered instruction has accelerated the obsolescence of the traditional time-based measures of learning in which these implicit agreements about learning were lodged. For instance, when the University of Phoenix offers three credits for a three-week online course, those credits are no longer anchored to time spent in a classroom. This leaves us without even inadequate proxies for what the baccalaureate degree adds up to.

The present confusion about the meaning of the baccalaureate degree suggests that in order to keep the credential viable, we should attempt to make explicit the kind and level of intellectual achievement we think the credential warrants. This effort faces several problems, however. The first is that higher education in this country is a "loose, baggy monster" (to borrow Tolstoy's description of *War and Peace*). Moreover, currently more than half of college students attend more than one institution on their way to the baccalaureate. As these students "swirl" through a diverse set of colleges and universities, they discover that each institution prides itself on its unique mission and clientele. Institutions' further division into disciplinary units, each with its own curriculum and learning goals, amplifies this fragmentation. As long as students and faculty focus on developing a particular disciplinary knowledge base or on a set of intellectual skills defined in a discipline-specific way, consensus on the overarching aims of college seems impossible.

Nevertheless, in the past few decades, the question of what fundamental intellectual capabilities college graduates should exhibit has received considerable national attention, both inside and outside the academy. The Pew Quality of Undergraduate Education and writing assessment projects (see http://www.pewundergradforum.org) and the American Association of Colleges and Universities' Greater Expectations initiative (see http://www.aacu.org/gex/index.cfm), for instance, have attempted to generate agreements among academics about the general aims of college. Outside the academy there have been similar attempts to articulate what college graduates should know and be able to do. Some of these efforts, such as the Secretary's Commission on Achieving Necessary Skills (SCANS, see http://www.academicinnovations.com/report.html), are focused on workforce preparedness. Others, such as the National Institute for Literacy's Equipped for the Future project (see http://www.nifl.gov/lincs/collections/eff), have a broader range, attempting to define the knowledge required "to meet the demands of [adults'] roles as workers, family members, and citizens." But perhaps the best-known articulation of the intellectual skills that the modern world requires can be found in Goal 6 of the National Education Goals (http://www.negp.gov).

The Goals—developed as a result of an education summit held in Charlottesville in 1990 by then-President Bush and a group of governors and later ratified by Congress—were designed to "improve learning and teaching in the nation's education system." Because of the visibility provided by their politically powerful supporters, the Goals have perhaps been the best-known benchmarks of educational progress in the nation's schools. They focus primarily on K–12 education, but one of the eight addresses adult literacy. This goal, Number 6, reads: "By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship." One objective under that goal targets collegiate learning: "The propor-

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tion of college graduates who demonstrate an advanced ability to think critically, communicate effectively, and solve problems, will increase substantially." This objective constitutes the core set of capacities that policymakers would like to see in college graduates: critical-thinking, communication, and problem-solving skills.

I think this definition of the general aims of the baccalaureate is one that academicians can accept. It combines relevance to the modern world with a traditional authority and a universality that are powerful enough to help higher education overcome its institutional and disciplinary fragmentation.

Historical Perspectives

PEOPLE HAVE BEEN PONDERING the aims of education for millennia, but at no time was the question discussed with more intensity than during the nineteenth century. Although those of us living in the twenty-first century are likely to see our time as uniquely challenging, the citizens of the nineteenth century also needed the intellectual equipment to deal with a fast-changing, turbulent world. Indeed, the skills and knowledge thought necessary to meet the challenges of the nineteenth century are the very ones mentioned in the collegiate objective under Goal 6. The list of mental tools with which the Goal 6 framers thought we should equip students for the twenty-first century—critical-thinking, communication, and problem-solving skills—was prefigured by the great nineteenth-century thinkers when they spoke about the aims of collegiate education.

Critical Thinking. A capacity for critical thinking is, if you will, the mental muscle developed in the study of a variety of fields. Education can be called "higher" when it develops mental muscles that function like physical ones do when the tennis lessons start paying off and you're left with the joy of the game—in this case what Matthew Arnold called the "free disinterested play of mind." To be truly "critical," that play of mind also needs to include the capacity to step outside one's own "center of self," as George Eliot called it, to reflect on one's own perspective and the point of view that has shaped what one is learning.

Critical thinking is built on a foundation of knowledge. John Henry Cardinal Newman, author of *The Idea of a University,* published in 1852, described "the formation of mind" as a habit of fitting new knowledge into what one already knows, which one then adjusts. Newman's account of how one learns is remarkably similar to what cognitive psychologists say about how mental models govern thinking and how education affects those models. In learning, one fits information into existing mental structures; in learning deeply, one adjusts those structures as necessary to accommodate the new information. Newman thought that true formation of the mind could not occur without broad knowledge, an understanding of the cultural and historical landscape and one's place in it. For an American living at the beginning of the twenty-first century, this means knowing where one fits into a large and very complex cultural and historical American picture, which in turn fits into a larger and even more complex global picture.

Communication. Rhetorical skill has been one of the most important marks of an educated person since the time of the ancient Greeks. This has meant more than the skill to speak or write persuasively, although such powers have been considered paramount. John Stuart Mill was the most eloquent writer on this subject. In *On Liberty,* he discussed the ability to engage in "free and equal discussion," which for him was the necessary condition of any person's capacity for improvement and self-correction throughout a lifetime. What Mill calls the "morality of public discussion" includes the calm self-discipline to argue according to the rules of logic; to consider all facts and arguments, even those that tell against your case; to listen carefully to what is said and represent it accurately in your responses; and to be willing to change in response to what you hear.

This is remarkably similar to what contemporary business leaders mean when they talk about interpersonal communication, which entails the ability to take in and respond to what someone *means.* This requires responding not just to the logic of the case but also the emotions, values, hopes, and fears that fuel it. The development of that kind of communicative skill is key to

our graduates' capacity to work successfully with other people in the modern world.

Problem Solving. Henry Adams, the grandson and great-grandson of presidents, said of his Harvard education that if he had it to do over again, he would study only French, German, Spanish, and mathematics. He was looking for communication and problem-solving tools. In a contemporary education, the disciplines aim to provide strategies for analyzing and solving problems. Contemporary students best learn the problem-solving skills they need when they have a chance to use the intellectual equipment acquired from a number of disciplines to solve real problems. These tools include not only the ones Adams identified but new ones as well, such as competence in using new technologies. Adams had to wait until the start of his career before that kind of education began for him; we should do better for our students.

When businesspeople talk about problem solving, they have in mind more than coming to a correct conclusion. They mean extracting from life's chaos the problems that are most pressing, finding a variety of responses to those problems, and determining which response is likely to be most successful under the circumstances. They value the capacity to estimate, horse sense, and the lightness of intellectual foot that thinkers from Aristotle to Henry Adams have also held in high esteem. We help our students learn these skills when we think, like Nobel laureate Isador Rabi's mother, that the question to ask a student is not "What did you learn today?" but "Did you ask a good question today?"

Why Should College Graduates Possess These Skills?

SKEPTICS MAY WELL ask *why* a college education should equip students with the ability to think critically, communicate, and solve problems. The men I have quoted all shaped their cultures, and were shaped by them, because they possessed to a remarkable degree the qualities they attributed to an educated person. In previous eras only a small group of educated men needed to be equipped to do that shaping, because the majority of workers were required not to lead but to follow. But in the postindustrial, postinformation age—in which the majority of workers are no longer "hands" but "heads"—a great many people (of both genders, all classes, and many races and ethnicities) need to be mentally prepared the way only the elite used to be. Then they too will be capable of shaping, rather than simply being subject to the effects of, the historical changes that will create the context for their lives.

So equipped, as National Goal 6 suggests, college graduates will possess the "knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship." These purposes of education—to prepare workers and citizens—are also rooted in the nineteenth century.

Work. When asked why they go to college, most students put "to get a good job" high on their list. Indeed, insofar as higher education enables people to use their mental strengths in useful work, it contributes to both their good and the good of society. This is a matter not simply of financial but also of personal well-being: consider how the sense of powers well-used compares to the feelings of alienation and boredom that many workers suffer—an alienation that was as familiar to the nineteenth century (think of Marx on this topic) as it is to our own.

Yet are the tools I have mentioned—the skills of critical thinking, communication, and problem-solving—really the ones that are needed in the workforce today? Didn't the writers I've quoted live and work in quite different, more parochial and stable worlds?

Many colleges, and many majors, today focus on providing their students with an education that will prepare them for a specific job. After all, whatever the CEOs say about wanting generally educated workers,

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their human resources officers are often looking for people whose specific skills have shaped them for a slot into which they can be easily fitted. The Bureau of Labor tells us, however, that a contemporary worker should plan on having between five and seven careers in his or her lifetime, and a person who wants to be prepared both for the first job and for the fifth needs something more than a technical education.

All people coming out of college need the advanced capacity to do something in particular, but they also need the capacities that previously were necessary only to the elite classes, especially the general intellectual skills needed to deal with change, a defining characteristic of Western society in the modern era. Henry Adams remarked somewhat hyperbolically, when on the verge of the twentieth century he began his life as a professional man, that his Harvard education had prepared him better for the year 1 than for the year 1900. Students graduating a hundred years later without critical-thinking, communication, and problem-solving skills would be similarly disadvantaged.

The success of a baccalaureate education should be determined by its ability to provide these skills. At a conference several years ago, Mitchell Fromstein, president of Manpower, Inc. (the largest temporary workers organization in the world), said that he used to value the capacity to fit into an organization rather than independence in the workers he hired. More recently, though, he has been looking for graduates with flexibility, the capacity to work with others, technological competence, global awareness, competence in a second language, and civility—in short, the kinds of attributes that once were needed only in the cadre of privileged men. In the new global economy, even temporary workers (most of us, soon) need to be independent thinkers rather than compliant order-takers.

Citizenship. We are also citizens, and our ability to act rationally in that capacity is one of the hopeful premises on which democratic citizenship is based. This element of the collegiate mission is deeply embedded in our history: the original goal of the colonial college was to provide moral education for society's leaders. In a democracy, that should include all of us. The ability to exercise the rights and responsibilities of citizenship includes but isn't limited to the capacity to vote thoughtfully and responsibly. It also includes the disposition and skills to balance individual good with the responsibilities we have to our communities. We are all much poorer when we lose a sense of civic responsibility and the enlarged sense of self that comes from understanding that we are a part of something beyond the self.

The exercise of civic responsibility does more, however, than simply promote the good of the community. Since the dawn of the democratic era, the capacities to communicate and solve problems have also been our best hope of ensuring harmony among communities. In *Three Guineas,* published in 1938, Virginia Woolf addresses the question, "If I want to stop war, where should I donate three guineas?" Her answer: to a college.

Personal Development. Finally, I would be remiss if I didn't mention another aim of education not considered in Goal 6. Not mentioned there is the chief value of my own education: delight. I love the perspective that comes from seeing where I fit into a larger picture—astronomical, historical, biological, and social. I love the strength that comes from learning new things and using my mental muscles. I love the sense of expansion and connection that comes from reading and hearing about things that are not accessible to my own eyes and ears, from having lifelong conversations with people long dead or far away.

The belief that our fundamental business as human beings is to grow and connect with others who are not within our immediate range underlies everything said by the writers I have been citing. Matthew Arnold, quoting the German poet Schiller, says that the end of art is joy; to my mind, it is also the end of education. That joy, more than an ever-increasing income, is the chief private good of a higher education.

THE JOB OF COLLEGES

IN LIGHT of these learning goals, what should colleges and universities do? While the general goals of education are remarkably constant, changing about as fast as riverbeds, the specifics of the curriculum change at the speed of the river itself. Colleges and universities should therefore continually check to be sure that the general goals are being reached by means of an appropriate and timely curriculum. They should define clearly, succinctly, and publicly their criteria and standards for graduates' attainment of these goals. They should organize their resources to generate as effectively and efficiently as possible the kind of learning that I have described. They should be sure that they not only teach but also model the kinds of capacities they expect their graduates to exhibit. They should create a community in which these skills can be practiced and in which the teaching and modeling of these abilities are rewarded. They should support curricular and cocurricular strategies and pedagogies to enable that learning. Finally, they should be willing to assess their results to determine how they might improve their practice.

The National Forum on College-Level Learning is one effort to begin the Sisyphean task of making explicit what a college degree signifies or should signify. It will not provide definitive answers; it is only the beginning of a serious attempt to use the best instruments now available to address the question that has engaged thinkers for so long. The Forum is searching for common ground in the various conclusions about advanced learning that people have reached over time, and for the congruencies that exist despite both historical and institutional variety.

It also leaves out a great deal. As Elizabeth Minnich pointed out after reading a draft of this article, the Forum neglects some of the capacities and dispositions that are the key goals of education (as opposed to training) and that we most want to see as the basis of our graduates' "grounded, contextualized, earned self-confidence." These capacities, essential to a good and joyful life, include the courage to face chaos and the creativity and humor that lighten and bring order to it, the integrity on which the trust infrastructure of civil society rests, the empathy that George Eliot saw as the chief aim of fiction and the basic requirement of a moral life, and the self-awareness that can make not only thought but emotions, in Minnich's words, more "nuanced and complex." Perhaps someday we will assess these elusive qualities; the core cognitive competencies identified by the National Forum are only where we start.

BUT EVEN THIS relatively modest attempt to reach consensus on the meaning of the baccalaureate and to determine what the degree actually certifies involves so much effort that the question naturally arises, Who cares? The answer: increasingly, everyone who has choices to make. In choosing which college graduates to hire, the captains of industry (to use the nineteenth-century term) need information about which skills and abilities are certified by a given diploma and which diplomas ensure that the bearer has the intellectual nimbleness the modern world requires. Students and parents, facing rising costs and confronted with a bewildering variety of institutions, might prefer to choose from among these colleges and universities on the basis of what their graduates know and can do, instead of on grounds such as reputation, price tag, first impressions, and hunches. We need to respond to these constituents in order to ensure their continued support.

For our own sakes too we need to address the question of what a college degree signifies. Many academicians today seem to want to recapture the coherence that their profession had in earlier, simpler times. That cannot be done by going backward, although a backward look can give us guidance for the future. If we are truly going to conserve the meaningfulness of the degrees we grant, and hence the integrity of the profession we practice, each generation of academics must reinvent the categories it has inherited. It is our generation's turn to take on that challenge.

Author's note: I would like to acknowledge the support of the Pew Charitable Trusts for the National Forum on College-Level Learning. This article is adapted from a shorter version originally published in the fall 1998 issue of *Cross-Talk,* a publication of the National Center for Public Policy and Higher Education. It is the result of years of conversations with Pat Callan, Peter Ewell, the members of the Forum's advisory committee, and the state representatives, to all of whom the author is deeply indebted. The author also thanks Elizabeth Minnich and, always, Alan Howard for their feedback on previous drafts of the article, which strengthened the final version immeasurably. *Note: The author retains copyright to this article.*