Spring 2001

Journal of the National Collegiate Honors Council -- Volume 2, no. 1 -- Complete Issue

Follow this and additional works at: http://digitalcommons.unl.edu/nchcjournal

Part of the Higher Education Administration Commons

http://digitalcommons.unl.edu/nchcjournal/237

This Article is brought to you for free and open access by the National Collegiate Honors Council at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Journal of the National Collegiate Honors Council --Online Archive by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Journal of the National Collegiate Honors Council

Spring/Summer 2001
Vol. 2, No. 1

Educational Transitions

with essays by...
Betty Krasne
George Mariz
Dail Mullins
Julie Fisher Robertson
Donna Rane-Szostak

With a Special Forum on Honors Education
led by
Samuel Schuman

with responses by...
Bernice Braid
Joan Digby
Jeffrey A. Portnoy
Steve Wainscott
Len Zane

A Publication of the National Collegiate Honors Council
The National Collegiate Honors Council is an association of faculty, students, and others interested in honors education. G. Hewett Joiner, President, Georgia Southern University; Rosalie Otero, President-Elect, University of New Mexico; Donzell Lee, Vice President, Alcorn State University; Earl Brown, Jr., Exec Sec/Treas, Radford University; Joan Digby, Immediate Past President, Long Island University CW Post. Executive Committee Brian Adler, Valdosta State University; Elizabeth Beck, Iowa State University; Ronald Brandolini, Valencia Community College; K. Celeste Campbell, Oklahoma State University; Ryan Commerson, Gallaudet University; Morgan Anne Good, SUNY Potsdam; Herald Kane, San Diego City College; Ann Raia, College of New Rochelle; Kathy Rogers, University of Alabama (Tuscaloosa); Jon Schlenker, University of Maine (Augusta); Blake Standish, University of New Mexico; Shirley Thomas, John Brown University; Casey Tippens, Oklahoma State University; Natalia Valenzuela, Columbia College; Stephen Wainscott, Clemson University; Norman L. Weiner, SUNY Oswego; Jack White, Mississippi State University; John Zubizarreta, Columbia College.
EDITORIAL POLICY

Journal of the National Collegiate Honors Council is a refereed periodical publishing scholarly articles on honors education. The journal uses a double-blind peer review process. Articles may include analyses of trends in teaching methodology, articles on interdisciplinary efforts, discussions of problems common to honors programs, items on the national higher education agenda, and presentations of emergent issues relevant to honors education. Submissions may be forwarded in hard copy, on disk, or as an e-mail attachment. Submissions and inquiries should be directed to: Ada Long / JNCHC / UAB Honors Program / HOH / 1530 3rd Avenue South/Birmingham, AL 35294-4450 / Phone: (205) 934-3228 / Fax: (205) 975-5493 / E-mail: adalong@uab.edu.

DEADLINES

March 1 (for spring/summer issue) September 1 (for fall/winter issue).

JOURNAL EDITORS

Ada Long (University of Alabama at Birmingham Honors Director and Professor of English), Dail Mullins (Associate Director and Associate Professor of Curriculum and Instruction, with Ph.D. in Biochemistry), and Rusty Rushton (Assistant Director and Adjunct Lecturer in English); Managing Editor, Jerrald L. Boswell (Seminar Instructor and Alumnus of the UAB Honors Program).

EDITORIAL BOARD

Gary M. Bell (Early Modern British History), Dean of the University Honors College and Professor of History, Texas Tech University; Bernice Braid (Comparative Literature), Dean of Academic and Instructional Resources, Director of the University Honors Program, Long Island University, Brooklyn; Nancy Davis (Psychology), Honors Program Director and Associate Professor of Psychology, Birmingham Southern College; Joan Digby (English), Director of the Honors Program and Merit Fellowships, Professor of English, C. W. Post Campus, Long Island University; John S. Grady (Economics), Director of the University Honors Program and Associate Professor of Economics, LaSalle University; John Korstad (Biology), Professor of Biology, Oral Roberts University; Jane Fiori Lawrence (History of American Higher Education), Vice Provost for Undergraduate Education, University of Vermont; Herbert Levitan (Neuroscience), Section Head, Division of Undergraduate Education, National Science Foundation; Anne Ponder (English), President, Colby-Sawyer College; Jeffrey A. Portnoy (English), Honors Program Coordinator and Associate Professor of English, Georgia Perimeter College; Rae Rosenthal (English), Honors Program Coordinator and Professor of English, The Community College of Baltimore County, Essex Campus; Samuel Schuman (English), Chancellor, The University of Minnesota, Morris; Ricki J. Shine (American History), Assistant Director of the Honors Program, Iowa State University; Eric Susser (English), University Honors College Lecturer, Arizona State University; Stephen H. Waincott (Political Science), Director of the Honors Program, Clemson University; Len Zane (Physics), former Dean of the Honors College, University of Nevada, Las Vegas.

2 JOURNAL OF THE NATIONAL COLLEGIATE HONORS COUNCIL
# CONTENTS

Call for Papers ........................................................................................................ 4  
Submission Guidelines .......................................................................................... 4  
Dedication .............................................................................................................. 5  
Editor’s Introduction, Ada Long ........................................................................... 7  

## EDUCATIONAL TRANSITIONS

*Telling Tales Out of School: Academic Novels and Memoirs by Women*, Betty Krasne ................................................................. 27  
*Helping Honors Students Improve Critical Thinking*,  
Julie Fisher Robertson and Donna Rane-Szostak ............................................. 41  
*Science Literacy and the Undergraduate Science Curriculum: Is It Time To Try Something Different?*, Dail Mullins .............. 53  

## FORUM ON HONORS AND HIGHER EDUCATION

*Cultivating: Some Thoughts on the NCHC’s Future*,  
Samuel Schuman .................................................................................................. 69  
*Further Thoughts on the Future of the NCHC*,  
Joan Digby ............................................................................................................ 73  
*A Small Step*, Len Zane ....................................................................................... 77  
*Cultivating Honors Excellence in the Other Garden*,  
Jeffrey A. Portnoy ................................................................................................ 83  
*It’s Ten O’Clock: Do You Know Where Your Students Are?*,  
Steve Wainscott .................................................................................................. 87  
*Cultivating Too*, Bernice Braid ........................................................................... 91  

## ABOUT THE CONTRIBUTORS

Spring/Summer 2001
CALL FOR PAPERS

JNCHC is now accepting articles for the Fall/Winter 2001 issue: "Honors and the Creative Arts." We are interested in hearing from those of you who have had experience teaching creative writing, studio art, any of the performing arts, etc., to honors students and would like to turn your experience(s) into something that can help honors programs (re)examine the role and practice of the creative arts in their curricula.

DEADLINE FOR SUBMISSIONS IS SEPTEMBER 1, 2001.

The subsequent issue of JNCHC (deadline March 1, 2002) will be a general-interest issue, accepting any scholarly articles related to Honors education.

SUBMISSION GUIDELINES

1. We will accept material by e-mail attachment, disk, or hard copy. We will not accept material by fax.
2. The documentation style can be whatever is appropriate to the author’s primary discipline or approach (MLA, APA, etc.).
3. There are no minimum or maximum length requirements; the length should be dictated by the topic and its most effective presentation.
4. Accepted essays will be edited for grammatical and typographical errors and for obvious infelicities of style or presentation. Variations in matters such as “honors” or “Honors,” “1970s” or “1970’s,” and the inclusion or exclusion of a comma before “and” in a list will be left to the author’s discretion.
5. Submissions and inquiries should be directed to:

   Ada Long
   JNCHC
   UAB Honors Program
   1530 3rd Avenue South
   Birmingham, AL 35294-4450
   E-mail: adalong@uab.edu

JOURNAL OF THE NATIONAL COLLEGIATE HONORS COUNCIL
DEDICATION

This issue of JNCHC is respectfully and appreciatively dedicated to Dr. Sara Varhus, former and final editor of Forum for Honors. From 1970 until 1996, Forum for Honors was the refereed journal of the National Collegiate Honors Council. Sara, who directed the Honors Program at the State University of New York College at Oswego from 1982 until 1988, remained committed to Honors and to the NCHC long after she moved into other administrative posts. Currently Dean of Arts and Sciences at SUNY College at Oswego, she began editing Forum for Honors in 1989 while she was Associate Dean. Sara generously contributed her excellence in scholarship to the national benefit of Honors education. We are grateful for the knowledge she imparted and the standards she set.
EDITOR’S INTRODUCTION

Ada Long
University of Alabama at Birmingham

The essays in this issue of JNCHC are diverse in origin, date of composition, discipline, methodology, and content. The contributors come from all kinds of institutions in all parts of the country. All, of course, are connected to Honors education, and the essays, despite their diversity, share a common theme that JNCHC’s managing editor, Jerrald Boswell, perceptively identified as “Educational Transitions.” George Mariz and Betty Krasne identify patterns of transition that have brought us from the past to the present in our emphasis on service learning and in gender representation within academia. Dail Mullins and Robertson/Rane-Szostak suggest curricular pathways to the future, Mullins through interdisciplinary science curricula and Robertson/Rane-Szostak through critical thinking.

The final section of this issue is a “Forum on Honors And Higher Education,” which also focuses on transitions into the future. And so the structure of these essays leads from past to present to future, first illustrating the patterns of change in the history of higher education and then proposing what patterns might be pending (and desirable) in the future. While the final “Forum” section focuses specifically on the future of Honors Programs and the National Collegiate Honors Council, all the essays here have at least indirect bearing on how we conduct Honors education.

The first three essays in this issue have historical importance in more ways than one. Each was accepted for publication in the Forum for Honors, the refereed journal for honors that was published from 1970 until 1996 and that is a major component of our organizational history. Sara Varhus, the extremely able editor of Forum for Honors for six years, stepped up to higher administration at the State University of New York College at Oswego and, thus, stepped down as editor, handing off the Forum in an excellent hail-Mary pass that was, alas, neither completed nor intercepted. Left hanging were several excellent essays that had been accepted for publication but never published. These included not only the three essays finally presented here but an excellent essay by Varhus herself.
EDITOR’S INTRODUCTION

(published in a quite different and updated form in the inaugural issue of JNCHC) and a very fine essay titled “A Semi-quantitative Analysis of the Impact of E-mail on Learning” by John Sohl of Weber State University. Extremely pertinent and useful in 1996, Sohl’s essay is an indicator of how quickly educational transitions take place now. The past five years have completely changed the technological terrain, and so—unlike the other essays—his became a museum piece, and he chose not to include it in this issue.

George Mariz’s essay, far from falling prey to the pace of history, thrives on it. He has provided a superb analysis of the historical background of service learning in higher education, demonstrating that it is not at all a new concept but that its purposes and motives have been transformed by its current contexts. He provides the analytical tools we all need to understand what we are and are not doing in our proliferating service-learning projects—and why. Since service learning has become a fundamental component of many, if not most, Honors Programs during the past decade, and since they have therefore become a standard focus of our NCHC conferences since the time Mariz wrote his essay, Honors faculty, students, and administrators all benefit from exploring the history and meaning of this educational trend. Simultaneously, readers of Mariz’s essay are rewarded with a stunningly concise and informative history of higher education in the United States.

Betty Krasne’s essay combines the disciplines of history and literature to provide a fascinating analysis of gender roles in academia from the perspective of women writers (and some men) in the second half of the twentieth century. Krasne points out (as does Mariz) that typically women are more numerous—often far more numerous—in Honors Programs than men are. Her essay provides insights into what women have experienced as they entered higher education in greater numbers and in higher-status positions within the past few decades. These insights are extremely useful not just in academia generally but in Honors Programs that have high concentrations of highly gifted and motivated (often driven) young women making up for lost time in a hurry. Krasne’s insights might also suggest the precarious, because new, nature of women’s academic ascendance and thus might help us better support our women students.

Mariz provides an historical approach to service learning, and Krasne a literary/historical approach to gender representation—both relatively new
preoccupations in higher education. Julie Fisher Robertson and Donna Rane-Szostak present a statistical analysis of another relatively new preoccupation in some quarters: “critical thinking.” They present the change in results on a test, designed to measure critical thinking, before and after a seminar designed to improve critical thinking. They suggest that Honors students, although they already score higher than average on such tests, can benefit by instruction focused on particular thinking skills. The subject of “critical thinking” has been a component of several NCHC conferences in the past decade or two, and the conclusions presented by Robertson and Rane-Szostak might be encouraging to advocates of this pedagogical approach.

Dail Mullins—in an essay written specifically for this issue and following up on the “Science and Honors” issue of JNCHC in fall/winter 2000—suggests ways to improve the introduction of science to non-science-majors. Instead of the traditional, discipline-based courses in chemistry, biology, physics, and earth and space sciences, he suggests interdisciplinary formats for teaching these sciences that might have greater appeal and value for students not majoring in the sciences. Given the tremendous changes that have occurred in most other components of the standard college curriculum during the past decades, the absence of innovations in the way science is taught is somewhat surprising. The content of, say, a current introductory biology class at the University of Alabama at Birmingham might be different from what I took at Stanford in 1963, but the format is identical as far as I can tell. Mullins suggests that Honors Programs can be leaders in introducing needed innovations, thus foreshadowing two essays in the “Forum on Honors and Higher Education”: heeding Sam Schuman’s call for Honors Programs to lead the way in providing excellence throughout our institutions (not just in our own programs), and anticipating Len Zane’s experience in using Honors as a base camp from which to provide just such excellence.

The final section of this issue is the “Forum on Honors and Higher Education.” At the NCHC annual conference, Sam Schuman was part of a closing plenary session I organized on “The Future of the NCHC.” With his permission, I circulated the presentation he made during this plenary to the full membership of the NCHC via our listerve, inviting members to respond to Sam’s ideas as part of this Forum. The respondents come from diverse Honors Programs, institutions, and parts of the country; they
EDITOR’S INTRODUCTION

focus on issues large and small, from a single course to sweeping cultural change; but they have one trait in common: they are all members of the Editorial Board of the JNCHC. In the future, we hope to have broader participation by the NCHC membership as we continue the precedent, inaugurated here, of a Forum on issues important to our membership. Meanwhile, however, it is surely a tribute to the excellence of our editorial board that they eagerly took on the challenge presented by Sam Schuman: to promote excellence not just in our own Honors Programs but throughout our colleges and universities and in a national as well as local context. My thanks to Sam Schuman for getting us started toward what could become a new and important educational transition.
Educational Transitions
Full Circle:  
The Reappearance of Privilege and Responsibility in American Higher Education

GEORGE MARIZ  
WESTERN WASHINGTON UNIVERSITY

Anyone familiar with current initiatives in higher education is well aware of the increasing emphasis on public service as a component of an undergraduate degree, and the rhetoric of contemporary dialogues might well lead one to believe that public service is an entirely new concept in American higher education. This essay offers a different view. Far from being new, public service in one form or another was a significant element of the college curriculum from the seventeenth century until the Civil War. The reappearance of this notion, I believe, signals a rebirth, but at the same time marks a departure from the trends that developed after 1865. At the same time, the field considered here is somewhat circumscribed. This essay is concerned with American higher education, but not with all of it. There is no mention of community colleges, an omission some may find serious, even inexcusable, in any discussion of the role of service in higher education. Likewise there is scant attention paid to the denominational colleges and universities founded between the 1820s and 1910s, which served the needs of an immigrant population and which also had significant service functions. In defense of these exclusions, I can say only that they occupy an interesting and important place in American higher education’s past, but they are not central to the argument presented here.

It will come as no surprise to students of the history of American higher education to be told its past is a checkerboard not only of accomplishment but of discontinuity and discord. Uniformity of opinion or purpose, far from the expectation, would be a source of astonishment.
FULL CIRCLE

Any summary of the topic must begin with the American liberal arts college, the fortuitous product of an English beginning, which grew according to its own internal dynamic after the separation of the colonies from the mother country. When the General Court of Massachusetts in 1636 authorized a grant of four hundred pounds towards the creation of a college, they were thinking in terms of the Oxbridge model and expected it to be merely the first of a number of such foundations which would be grouped physically and spiritually around one another. Of course, the combined effects of physical, and later political and cultural, separation led to a very different result, with Harvard College, as it became known in honor of the man who donated his library to the institution, pursuing an independent line of development. Harvard became the model for the liberal arts colleges, which constituted the vast majority of all collegiate foundations before 1865.

While its curriculum had advanced beyond the old *trivium* and *quadrivium*, both were still recognizably present in the academic program presented to students in the period from the mid-seventeenth to the mid-nineteenth century. The grammar, rhetoric and logic of the first two years' study in the medieval university had become training in Greek and Latin, not markedly different from their *trivial*, scholastic predecessors, especially when one considers the parts of Renaissance philosophy that crept into the classroom. The last two years were given over to the study of rhetoric, mathematics, and natural philosophy, with here and there, depending on the college and the expertise of particular professors, instruction in modern languages (chiefly French and German).

The education thus dispensed was heavily moral and linguistic, while training in the sciences was notably absent, and the chief and announced aim of such a program of instruction was to produce a Christian gentleman, an emphasis that became more evident as the student progressed through school. The clergy—and clergy of various stripes dominated most though not all liberal arts colleges—played a central role in the development of the curriculum and gave a specific direction and tone to all instruction. Most of these institutions had as one, though not their sole, purpose the training of a learned clergy. Their founders and benefactors also determined the schools should produce men (and only very seldom women) who preserved and promoted a distinctively Christian society. That emphasis received its finest statement in the course in moral philosophy required of
all students in the senior year, which would almost invariably be taught by
the college president, who would almost invariably be a clergyman. There
the students learned it was the Christian gentleman’s responsibility actively
to do social good, particularly by maintaining Christian civilization, especially
when threatened by a spirit of French license. Yale, Brown, Trinity, and
Wesleyan all had such courses as graduation requirements, and their
expressed purpose, as the historian Isaac Sharples noted, was “…to create
that product most needed in America, the public-spirited scholar, the
broad-minded and welcome leader of democracy.” In every institution,
the thrust in such courses was on the Christian’s civic duty to serve the
public good and maintain the stability of society. Through civic activity,
charitable work and exemplary behavior, as student and later as citizen,
the Christian gentleman was to serve as one of the props of society.

Of course, a college education was generally the avenue to prosperity
as well, but neither students nor professors saw it as the means to the
accumulation of great wealth. Rather, financial comfort and status were its
rewards, especially the level accorded to one who found his livelihood in
the learned professions, the clergy, law and medicine.

The other side of the coin of responsibility was privilege: education
provided advantages to the recipient, again not only in the financial sense,
but in the intellectual serenity and breadth of mind and character that it
inculcated in those so trained. Indeed, in the pre-Civil War era, education
was a privilege open to only a few. With no more than two hundred
institutions, many of which survive only in scanty and uninformative
collections of records, it is a safe assumption that there were no more than
ten thousand students in American higher education, most of those in a
small number of colleges which dominated the landscape. Yale and the
University of Virginia between them enrolled more than ten percent of all
college students in the United States. The number is all the more remarkable
when one realizes that the population of the country already stood at more
than 31,000,000.

The place of the liberal arts college changed dramatically after the
Civil War, as did the nation as a whole. After the trauma of war and
Reconstruction, the reunited republic experienced economic growth and
industrialization on an unparalleled scale. Accompanying industrialization
were changes of profound significance in both the composition and
distribution of population. The movement from field to factory was by no
means complete by 1900, but dramatic alterations in population concentration were already apparent. Urban centers adjacent to the new, developing transportation networks of the Midwest and the Great Lakes sprang up, and new urban giants such as Chicago and Cleveland displaced the older manufacturing centers of the Northeast. Increasing numbers of foreign-born people constituted another new element in industrial America. Though the United States had always been a land of immigrants, the newcomers of the post-Civil War era differed from their predecessors in both kind and extent. Until the 1880s, Northern Europeans, chiefly Germans and Irish, constituted the bulk of the new arrivals. By 1890, Southern and Eastern Europeans, Poles, Italians, Greeks and Russians, outnumbered the more traditional groups. While they helped fuel the industrial expansion of the late nineteenth century, they also brought with them foreign customs and ideas, many of the latter economic and social doctrines disquieting to the older, more settled segments of American society.

The response of American higher education to manifold new circumstances was by no means uniform or even coherent, as public and private segments of society reacted differently. States founded or reawakened higher education systems, while many private individuals endowed a new kind of collegiate, more properly university, foundation. In this new environment, many of the liberal arts colleges entered a period of relative stagnation while others received a spur to action from the new colleges and universities.

The large state university constitutes a significant response to the new industrial order. While those who wrote the founding legislation for these institutions would most likely not comprehend in detail what has become the current scope and scale of their creations, it is unlikely that they would be dissatisfied with their evolutions, and most would, I think, find the modern "flagship research university" in keeping with their original legislative intent. While some of these institutions were born before the Civil War, notably the Universities of Virginia and Missouri, and while others, most notably the University of Michigan, were created in the spirit of the old liberal arts college—to produce students with well trained minds and charitable, liberal spirits—most date from the post-war era and reflect the dominant American themes of individual improvement and economic progress. Public higher education in the United States, from its inception, was not only an alternative to the narrow curriculum of the entrenched liberal arts college
but a recrudescence of the spirit of laissez-faire so prevalent in the post-Civil War United States. Proponents saw the state university as the means to promote the economic advancement of the individual and the economic welfare of the nation as a whole.

As early as the late eighteenth century, many states tried to establish schools, e.g., Jefferson’s University of Virginia, or to expropriate existing ones, New Hampshire’s attempt to gain control of Dartmouth being the most explicit example of the latter tactic. In both instances, the exponents advocated a more modern version of liberal education, freed from the narrow, sectarian boundaries of more traditional institutions. However, it awaited the end of the nineteenth century before the state university began significant development. Two pieces of federal legislation are particularly important in the history of public higher education in this country: the Northwest Ordinance of 1787 and the Morrill Act of 1862, whose scope was expanded by an additional act in 1890. The first required the states carved from the territory included in the ordinance’s domain to set aside tracts of land for state universities. The second extended the provision of land grants for state higher education to the older states in the Union. The newer state universities resembled Jefferson’s University of Virginia in many respects, but the intellectual foundation on which they rested differed in fundamental ways. First, its curriculum was more “democratic,” with no branch of knowledge, particularly the classical curriculum, enjoying a special place. Second, the state university emphasized practical subjects, especially those with an observable economic return for the individual student. Additionally, the new state universities were created specifically to drive the state’s economic engine, particularly if they were land grant institutions. These latter offered services to farmers and later to homemakers and increasingly featured programs that aided agriculture, and in some cases industry.

The era that witnessed the birth of the state university also saw the coming of a new kind of private institution of higher education, the large, private, research-oriented schools. Although many of them could trace their origins to the traditional liberal arts college, they ultimately became much different sorts of institutions. Most were founded by magnates, who almost always were men who lacked much in the way of formal education. Moreover, they took their inspirations from the American infatuation with the German universities, which resulted from the experience of many young
students who made their ways to Berlin, Göttingen, Jena, and other German universities after 1865. Less influential but worthy of mention was Abraham Flexner’s study of European and American universities, and its advocacy of the German model—with its certainty in the rational organization of knowledge and the seminar method—as the proper one for a nation which aspired to scientific, industrial, economic, and intellectual modernity. The first of these was endowed by the financier Johns Hopkins in 1876, who gave the first president of his namesake university, Daniel Coit Gilman, the opportunity to create an institution according to his own dictates. The result was a school which still taught classical subject matter but whose distinguishing characteristic was a modern curriculum stressing science and research. The model served as a basis, though in less stark form, for Cornell (1868), Stanford (1891) and many others. As with Johns Hopkins, both Cornell and Stanford were founded by men who had made fortunes in industries such as telegraphy and railroads.

The most important of all institutions in this group was and remains the University of Chicago. Unlike the others, it began life not on the research university model but as a more traditional institution, a liberal arts college founded by John D. Rockefeller to train ministers for the Baptist faith. Though it failed in its original intent and was recreated on the German model, it reflected Rockefeller’s strong religious convictions, not expected in a Robber Baron, and retained much of its original emphasis for many years. Rockefeller made it a point to hire Baptists, particularly Baptist ministers, as faculty members whenever possible, and he insisted thorough searches be made for such men when positions were filled. To underscore the Baptist nature of the institution, Rockefeller specified in the University’s original charter that only Baptists would be allowed to serve as trustees. Nor was the ethic of social responsibility, linked to the privilege of higher education, lost in the new university. Many of the new faculty were dedicated to the principles and activities of such a life. A good example at Chicago was Albion Small, the first head of the nation’s first department of sociology. A Baptist minister by training, Small was active in the YMCA and social settlement work in Chicago, though he discouraged the social work tradition within the practice of academic sociology. Robert Park, his successor, carried on an emphasis on personal social work though he, likewise, was less concerned with the meliorative aspects of the discipline than with the quantitative emphasis then emerging in sociology. However,
George Mariz

Chicago was unusual if not unique in retaining its religious and social service emphasis. Most of the newer private universities stressed a close connection to private industry and a propensity for research that resulted in direct economic benefit.

The new private research universities had a significant, even a transforming effect on the older liberal arts colleges. To both administrators and alumni, it was apparent that the future lay in the new university form of organization, the modern, science-based curriculum, and basic research. In 1869 Charles William Eliot, the new president of Harvard, advocated curricular modernization, openly calling for the institution of an elective system similar to the University of Virginia’s. Three years later, Harvard became in fact, if not name, a university when it established a “graduate department.” Yale changed its name and its form of organization when it became Yale University in 1887, and in 1896 the College of New Jersey took the name of the town in which it was located and became Princeton University. The new names reflected profound transfigurations occurring in these institutions.

A somewhat parallel development occurred in the nineteenth and twentieth centuries with the creation of new denominational institutions, founded chiefly to serve the children of immigrant populations. Most, but by no means all of these were Roman Catholic colleges and universities, often in core cities. Frequently, they were multi-purpose, with highly developed professional schools, particularly law and medicine, existing side-by-side with programs to allow newly arrived people to gain literacy in English.

The final piece in this post-Civil War mosaic of higher education was the normal school. As with the state university, there were normal schools—at least they were “on the books” as a result of the passage of enabling legislation in at least a dozen states before the Civil War—but it was not until the late nineteenth century that they appeared as concrete entities. Most preparation of teachers before the 1890s was carried on in short “institutes” of a few weeks’ duration at established colleges or universities, for enrollment in which there were no admissions requirements. In other instances, training occurred in a secondary school, with admission open to those who had a primary education. While older private and public institutions also became interested in teacher preparation after 1870—the University of Michigan, the University of Iowa, the University of Missouri,
FULL CIRCLE

and Columbia University (formerly King's College, a liberal arts institution)—all created departments of education or other free standing units whose purpose was to train teachers, states were more aggressive in founding newer normal schools. By 1875 their numbers had grown to more than 125, and by the turn of the century, there were more than 300. In 1900 enrollment in normal schools exceeded 65,000. In terms of curricular philosophy and the types of education they offered, the normal schools were a different breed from any of their predecessors, and the curriculum for teacher preparation was, at best, variable. In some cases, Columbia University's Teachers College being the best example, students were required to take a blend of courses from the traditional liberal disciplines buttressed by work in pedagogy. The emphasis was on a balanced education, and, in modern terms, the new teacher emerged with something approximating a disciplinary major. However, in many institutions, most notably state normal schools which accepted students after a primary education, courses in pedagogy and basic skills, including instruction in reading and penmanship, constituted most of the student's work. None of the formal training in subject matter that characterized degree work in the older or newer colleges and universities was present here.

The forces that actuated the normal school movement also differed from those evident in the foundation of older institutions. The political and philosophical justification for their creation rested on a dual underpinning: teachers were needed to educate the nation, particularly those recently arrived in the nation, for citizenship, and an educated population was necessary to the economic well-being of the individual, the several states, and the country as a whole. Both arguments were compelling, and most states authorized normal schools in several of their regions; the notion of a normal school in each corner of the state gained credence in many places. As with the state universities, the leading force behind their creation was economic and political, which fit well with the ethos of a nation just entering the throes of the modern world. There was, as well, one very significant unintended consequence. The normal school movement brought large numbers of women into higher education for the first time, a group whose outlook and experience differed in many respects from those of their male colleagues. That story is an interesting and portentous one, and unfortunately outside the scope of this piece.

This brief survey will, I hope, indicate that among the variety of
institutions of higher education in the United States, the notions of privilege and a linked social responsibility were significant only in the old liberal arts colleges. This is not to say these ideas were not present elsewhere, but nowhere did they hold sway with such force as they did in older, more traditional institutions, and these ideas never gained much of a foothold at the newer ones. Thus the reappearance of the ideas of privilege and responsibility at this time allow us to make some interesting comparisons and to speculate on the future of the programs that advance these ideas. I have chosen as the modern text for examination the current Campus Compact, not only because it is the largest of these movements but because it is the one with which I am most familiar.

The Campus Compact was founded in 1985 by a group of college and university presidents, only a few more than a literal handful, concerned with providing what they termed “service opportunities” which would allow students to employ their academic training in a setting where they might perform socially useful work and gain practical experience. Since its foundation, the Compact has remained committed to its initial goals and has remained as well an organization which functions ultimately at the presidential level—no campus can join without a clear signal of support from its president, and in many institutions the officer responsible for the compact’s day-to-day operations reports directly to the provost or, in rare instances, to the president. Bolstered by aggressive leadership and by the National and Community Service Act of 1990, its growth in slightly more than ten years has been striking. [Editor’s note: The figures presented in this paragraph reflect the realities of 1995, when this essay was accepted for publication in the NCHC’s former refereed publication, Forum for Honors. See the introduction to this issue of JNCHC.]

From its initial seven founding presidents, it has grown to more than 350 members nation-wide, functioning as both a clearinghouse for information on educational opportunities and a reservoir of technical expertise. In about a dozen states, including my own state of Washington, all the four-year public and private institutions are now members, and in Washington as well as others of the dozen states noted above, many of the state’s community colleges have also joined. There is no state without at least one member. It is noteworthy, I believe, that one of the founding members, and the one that serves as the central clearinghouse, is Brown University, one of the transformed liberal arts colleges described earlier in this paper.
FULL CIRCLE

Perhaps the most innovative in providing outlets for social service work has been Amherst, an unregenerate liberal arts college!

The literature of the Washington State Campus Compact, almost identical to that of the national body, promotes the notion that “…service is an integral part of preparing college students for their roles as civic leaders.” Additionally, it should “…place civic education, civic participation, and social responsibility squarely within the academic mission of higher education.” Further, the Compact’s central missions “…are to model, through action and activity, a commitment to the ethic of service…” The key to service is something called “service learning,” which the literature describes as:

A method under which students learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs and that are coordinated in collaboration with the school and community; [and] that is integrated into the student’s academic curriculum...

It is evident that such service carries an award of academic credit, and as the old adage stipulates, students are encouraged to do well by doing good.

Through the Compact, students have embarked on a number of projects that both accomplish socially useful ends and provide them with a good deal of real life experience, all the while making progress toward their degrees. On my own campus, participants in the program have raised funds for a runaway youth shelter, worked with residents in homes for the elderly and volunteered in the local hospital. The list could go on, but there is no need to multiply examples. There is no reason to believe that the experience of Western Washington students is unique in the state or nation.

If one compares the economic aspects of the modern incarnation of the instinct to service with what has been presented here as its nineteenth-century counterpart, some interesting points emerge. Both have an important economic component. Entrance into the professions or politics was common for the nineteenth-century student, while the modern student frequently goes on to a career in social work or a similar field. Some Compact students from our campus program have entered the ministry. The connection between education and livelihood is more direct and more
obvious now, though the standard to which the student may aspire is comparatively less comfortable than in the nineteenth century. At the same time, the notion of education as privilege is more and more difficult to support. In a nation where fully half of all high school graduates go on to some form of post-secondary training, and where a college degree is mandatory for many types of employment, attendance scarcely constitutes a privilege. Entrance into a highly competitive institution or an Honors Program may be, but mere attendance is not. The appeal now is to what one “owes” in a loosely defined social sense rather than what one is obligated to do on moral grounds.

One significant difference between the old and new remains to be discussed. In the traditional liberal arts college, enrollment was exclusively male, while females constitute a majority of students in higher education today. Moreover, at least on my own campus and in service learning projects, females constitute the vast majority of students. Women outnumber men by more than two to one in Western’s Campus Compact activities. It is true that, as an institution, we have more females than males—about 55% of Western Washington’s enrollment is female—but the disparity between men and women in service learning is significantly larger. At least at Western Washington, women tend to be represented in larger numbers in the sorts of programs where service learning is more clearly an adjunct to the major, e.g. the so-called helping professions, education, and psychology, but we have no hard statistics and no survey results to indicate any underlying reasons for the choice of the service learning options. While I have asked programs on other campuses, it appears that their data are no harder than our own, but anecdotal evidence from friends and colleagues at other institutions indicates at least some agreement with our experience at Western. I think this point bears further inquiry by those capable of undertaking it.

This brief survey has, I hope, brought a few leading ideas to the surface. First, the notion that higher education is a privilege that confers on the recipient a consequent responsibility is an old one, coeval in the American setting with the very foundation of higher education. Indeed, it was one leading, if not the leading, idea in the liberal arts college tradition. Of course, coterminous with this idea were also concepts of paternalism and social control that are uncongenial in modern American universities and colleges. That aside, it is equally clear, I think, that it was with the appearance of the
modern educational establishment, in particular the public and private research institutions and the normal schools, that the importance of the notion of service declined. In fine, we may view the rise and cultivation of the modern individualist ethos of the twentieth century as the foil to the ethic of service. If this ethic is reappearing, if the Campus Compact is the recrudescence of the service ethic, it also bears many of the hallmarks of this modern ethos. The Compact is specifically vocational in its thrust—one is "called" to do well by doing good. Service may never have been selfless, but it is certainly no more so now than formerly. If this be the case, let us at least work the reappearance for what it is worth.

******

The author may be contacted at
Honors Program
Western Washington University
Bellingham, WA 98225-9089
e-mail: George.Mariz@wwu.edu
BIBLIOGRAPHY


The following article has some of the attributes of a relic. It was originally written for the old *Forum for Honors*, shortly before its demise. Therefore, the books and issues it discusses take on a different perspective now that the reborn *Journal of the National Collegiate Honors Council* has offered to publish those articles stranded by the former publication’s termination.

However, perhaps the topic of gender and the academic novel is more, rather than less, in the news these days. In an article published 21 October 2000, the “Arts and Ideas” section of *The New York Times* devoted the better part of a page to the academic novel, under the heading “Satire in the Ivory Tower Gets Rough,” and cutely subtitled, “You Can’t Make an Academic Spoof Without Breaking a Few Eggheads” (B9). The writer, Sarah Boxer, starts out with the observation “Once upon a time, the world of academic satire seemed to be a British protectorate.” Although she dates the American tradition from Mary McCarthy’s *The Groves of Academe* (1952) and mentions Jane Smiley’s *Moo* (1995), her point is that nothing much was going on until 2000, when three well known writers came out with novels set in the academy: Saul Bellow, Philip Roth, and Francine Prose. The article I originally wrote for the *Forum* traces a different history, and so I have let it stand as Part II of this piece. My argument back in the mid-nineties was that those of us paying attention to what goes on in higher education can learn more than we may want to know by reading the academic novels and memoirs of women writers. In fact, the powerhouse list on which Boxer focuses in a sense goes to the heart of my argument about gender.

But to fast forward, I too have had occasion to look at some more recent work. A sabbatical in 1998-99 enabled me to spend time...
TELLING TALES OUT OF SCHOOL

researching and writing a family memoir focused on the theme of education. In the process of doing background reading in memoirs, I again came across that subspecies, the academic memoir. Two in particular, both appearing in 1999, make a neat pair of bookends: In Plato's Cave by Alvin Kernan and My Kitchen Wars by Betty Fussell. A discussion of these works is the substance of Part III.

The question of what all this has to do with Honors education is another matter. That connection is based not on research but on eyeballing general meetings, regional meetings, and committee meetings from my days in NCHC, and on observing the population of Honors Programs, our own and others, over the years. Readers will thus be asked to overlook the lack of scholarly data on representation by gender in Honors education, though I hope some will respond by supplying statistics.

II

After years marked by political conflicts over legislative ideas on affirmative action, it is worth remembering that women have been noteworthy beneficiaries of affirmative action policies, both written and unwritten. Not only do we have women's sports claiming a share of media attention, but we have an increased statistical awareness of representation by gender in many aspects of education. It is possible to chart changes in salaries and numbers of people by gender at each level in any given academic field. The Chronicle of Higher Education periodically devotes space to gender issues, and Academe has numerous articles and statistics on topics related to gender. The July/August 1995 issue, for instance, commemorating the 75th year of women's suffrage, looked at the relationship between women, higher education, and the suffrage movement. The need for research, the quantity of data, are results of a climate of affirmative action, and pressure for change results from the information revealed by the research.

I am not aware of any research that demonstrates whether or not Honors Programs have been directly affected by responses to affirmative action, but it has been my impression that more women than men now seem to run programs, and more females than males generally participate. Naturally there have been changes over time; for instance, the founders of the group that has become NCHC were predominantly male, and certain programs arising out of schools or departments with a heavy emphasis on
fields in which women are notably underrepresented have Honors Programs that are more heavily male, but from surveying honors assemblies it would appear that there are somewhat more females than males participating in Honors Programs across the country. Why this should be so is an interesting question for research. But what started me thinking about gender distribution in academe was a novel about the academy written by a woman. There have been a number of such publications, but this one received more notice than most.

Since novels by women are bound to reflect a different picture from those by men, reading books by women writers reminds one that males and females experience higher education differently. Thus a novel by a woman which locates itself in the academy is part of a tradition of its own. The novel which set off this train of thought was *Moo* by Jane Smiley. This is not to say that Smiley composed a book such as Marge Piercy or Erica Jong were turning out in the seventies, a feminist tract, or an exposé of sexploitation, but her work takes its place along with previous works by women which have a college or university as their setting. These novels and memoirs form a subset because they give us a particular perspective on women's educational experience, in the process telling us a good deal about the nature of our higher education system.

The tradition of women writing about life in the academy has been in a state of change ever since the women's movement of the sixties gave new impetus to writing by women. The academic milieu in which women writers were operating is depicted in some detail by Diana Trilling in the first volume of her autobiography where she describes Radcliffe, Harvard, and Columbia as she saw them from the second world war to the time of her husband’s death in 1975.

In her memoir she points out that she “had not been sent to college to prepare for an independent life, either emotional or financial” (77-78). In fact, her acceptance into Radcliffe was met with anything but pleasure on the part of her family. But they need not have worried because, according to Trilling, what the college specialized in was training in comportment, civility, and the proprieties (71-72). Trilling, who graduated from college in 1925 and spent almost all of her life in the world of the university, has much to say about the ways in which that institution—and others connected with it—was never user-friendly for women. She remarks, as so many of her generation have noted, that
TELLING TALES OUT OF SCHOOL

In common with so many college women even today, I graduated from college wholly lacking in the professional definition which one finds in virtually any man of similar ability and training. I was competent, I think, as the Harvard men alongside of whom I studied at the Fogg. But I could not imagine myself in the important positions which they naturally looked to and eventually held. (76-77)

Trilling’s intellectual capacity and vague professional aspirations were not only at war with the bourgeois values of her middle-class family. Her abilities, it turned out—surprisingly—also put her at odds with the academic community in which her marriage to Lionel Trilling, a Columbia University teacher, placed her. Because, as she remarks, “Lionel’s dissertation director cautioned the young members of the English Department against the dangers of intruding parenthood into their academic careers...” (412), women were looked upon as not even a necessary evil. When, after many years of marriage, and after her husband had long finished his studies, she finally gave birth to a child (their only one), she tells how a more senior member of her husband’s department “turned his eyes away from the infant’s carriage lest he have to recognize that biology had been in process” (412). When Trilling describes her own attempts to write, she sounds like Jane Austen speaking about the conditions under which she wrote: “I worked in the living-room in the midst of family traffic...largely by improving my concentration, I learned to work at my living-room desk, whatever might be going on around me” (417). Trilling tells of being sent to Europe by the Ford Foundation in 1967; the only female member of the group, she was excluded from after-dinner discussions, “and in 1967 no male member of the company protested my exclusion” (132).

This, then, was the atmosphere prevailing when women in the late sixties and seventies, the Marge Piercys and Erica Jongs, began to write what might be called novels of complaint. A sampling of the next wave, novels of the eighties that were somewhat less specifically focused on grievances, nevertheless still shows an emphasis on women’s second class role in the academy. In Amanda Cross’s Death In A Tenured Position (1981), a mystery story she dedicated to May Sarton, Cross’s narrator, the detective Kate Fansler, specifically notes the role of her predecessors when she remarks, “The women I don’t defend are those who came along in the seventies sneering at the woman’s movement but reaping the reward
other women had won for them” (54). The novel is set at Harvard, which is no more hospitable to women than Columbia was to Diana Trilling decades earlier. This should come as no surprise to those who know that Amanda Cross is the pseudonym of Carolyn G. Heilbrun. Heilbrun was at Columbia when it was under pressure to broaden its faculty representation of women, and eventually she became the Avalon Foundation Professor in the Humanities Emerita. She is also the author of a work entitled *Writing a Woman’s Life*, a title suggesting, as Virginia Woolf had prophesied some years earlier, that the how and what of writing have a strong gender connection.

When inviting Kate, the protagonist of *Death In A Tenured Position*, to come up to Cambridge, one of the other women in the novel tells her, “I’ll send you a nice fat packet about women at Harvard. It’s a particularly depressing collection of materials” (25). The plot of Cross’s work revolves around the idea that the Harvard English Department has been made an offer it can’t refuse: a million dollars on the condition it hire its first woman professor who, this being a murder mystery, quite shortly ends up dead. The author has nothing good to say about the college, the department, or most of its members. Her rhetoric may occasionally make fun of “those awful women’s libbers” (27), but her target is sexism in the institution, summed up when the narrator is given an attic room at the Harvard Faculty Club, which strongly resembles a servant’s quarter in which nothing works, and she notes, “Harvard’s general attitudes toward women were not badly represented by this room” (27).

The department chairman grudgingly acknowledges, “Most of our best students are women; that’s true everywhere in graduate studies... so it seems only right that they should have at least one representative of their sex on the faculty of the department. And then, of course, I was glad that Janet [the first woman professor] wasn’t a real feminist....” (128). But by and large the feeling of the faculty is summed up by the chairman’s reminiscence about this (literally) short-lived professor: “Of course, given a choice, I’d have chosen not to have a woman professor in the department. It’s bound to cause problems” (128). It’s safe to say that self-esteem for women whose paths cross the university is not an issue; it doesn’t seem to exist as a possibility.

Across the way, but in the same decade, Rebecca Goldstein’s *The Mind Body Problem* (1985) takes on the Princeton establishment. In this
case the narrator is married to a brilliant mathematician. Again, the narrator, like Kate Fansler, is portrayed as highly educated, yet this only serves to put her at odds with both her own middle-class background and the rarefied sphere of her spouse, who is given to spacey musings, hence the “mind body problem.” The protagonist is as much a fictional third wheel in this eighties novel as Trilling was in her husband’s academic world several decades earlier, although the effect here is often hilarious and considerably more involved with female sexuality, not to be confused with sexual harassment.

Back at Harvard, in Anne Bernay’s Professor Romeo (1989), sexual harassment is the name of the game, as the title might suggest. Rumor has it the book is a roman a clef and the professor, who gets his comeuppance at the end, was indeed let go. In any event, the author does a meticulous job of showing how the protagonist thinks and operates. Her portrayal anatomizes the by now all too familiar story of how professorial power can be sexually corrupting.

By the time the nineties arrive, the sexual games, the gender politics have taken another turn. In such books as Cathleen Schine’s Rameau’s Niece (1993), Ann Beattie’s Another You (1995), and Smiley’s Moo, all set in places centered on higher education, the attitudes are more subtle, the games people play more complex. Schine’s protagonist, Margaret, starts out speaking of herself in the old self-deprecating tone of the women who saw themselves as academic groupies: “Margaret mused on her own self-absorption. If people expected anything of me, I resent them and feel incompetent and ill at ease. And yet I expect so much, and if I don’t get it, I feel only contempt. I’m sort of an asshole, she thought” (34). Though a scholar and writer in her own right, she reflects about herself in the negative-speak of previous academic wives: “Sometimes she felt as small and aloof as a spider, hanging by its thread. No ground beneath its several feet, nor water. But at least a spider could spin a web, a frail sticky gathering place for stray passersby” (66). However, Margaret turns out to be quite a web spinner in her own right. Convinced that her professor husband must be having an affair with one of his nubile young students, she stages a preemptive strike by committing adultery, only to find out that her ever loving husband has done no such thing.

Similarly, in Beattie’s novel a male professor chastises himself for thinking about kissing one of his students while, unbeknownst to him, his wife, a real estate broker, is romping in flagrante around the houses she is
supposed to be selling. Thus by the nineties, in the twists and turns of the plot, students as well as faculty, wives as well as husbands, young as well as old are not what they may seem, are interchangeably good and guilty, used and users.

Speaking of Jane Smiley’s novel *Moo*, Alison Lurie remarked in *The New York Times* that “the novel is less concerned with fights over tenure and multicultural curriculums than it is with a mining controversy and the fate of a huge pig” (28).* Well... for those in academe, *Moo* is to the college scene what *Primary Colors* was to the election scene: an insiders romp through a thoroughly fallible institution and an introduction to its cast of highly imperfect types. True, the novel is not a seamless send-up of academics in the David Lodge style. True, the hog and the mines are not unimportant facets of an almost ridiculously complex plot. But more to the point, they are mere plot devices on which this send-up of the big university, more particularly the big mid-western university, is hung.

If this sounds as though I liked *Moo* and would recommend it, the answer is “yes” and “no.” For a reader coming off of *A Thousand Acres*, *Moo* comes as a shock. While the course of Smiley’s previous work had already shown great variety by the time she came to write *A Thousand Acres*, the high acclaim—National Book Award and Pulitzer Prize—given that novel overshadowed her previous work. She seemed to dawn upon the national literary scene as a new, prize-winning author. And although there were some critics who chafed at the author’s schematic references to Shakespeare, with remarks about how her use of “King Lear” resulted in “a rather pretentious, overblown tale that often lapses into phony, archaic language” (Kakutani), the general opinion was that *A Thousand Acres* was masterfully done. The author has the power to create characters with such strong force fields that they distort any lines with which they come into contact—land, family, friends—in ways that inevitably lead to tragedy. And who is able to write tragedy in this era of high cynicism? But whereas

* Lurie’s cool response may be retribution for the mixed reaction to her 1984 novel. From her first novel, *Love and Friendship*, to *Foreign Affairs*, she had taken professors and their natural habitats as subject, but one critic had noted that the characters in the latter novel were “unappealing” and the “contrivances labored.” Unlike the sympathetic characters in Smiley’s work, Lurie tended toward “stinging” portrayals.
TELLING TALES OUT OF SCHOOL

Tragedy in the classical sense involves characters who occupy a heroic dimension above and beyond us, the cast of *A Thousand Acres* are out of the tradition of writing about small-town USA. The magnetic field the author creates does not transport us to dramatically far off times and places. The America she presents seems to be around the corner from yesterday, a corner we recognize but cannot see around. Sherwood Anderson, Sinclair Lewis, maybe even Thornton Wilder are names that come to mind... and going down that road landed us in *Peyton Place*.

However, Smiley’s rich prose in *A Thousand Acres* was able to make even an extended evocation of a farm drainage system a memorable reading experience. Through her cast of characters, people readers come to know intensely, the author was able ultimately to tie together a series of trendy issues—sexual abuse, environmental pollution, farm economy—that could easily have fallen over the edge into clichés. Perhaps Smiley’s ability to render the whole of farm and small town life—the church suppers and the swimming hole, the town shops and the rotation of crops, the homestead and the price of grain—should have prepared a reader for *Moo* with its Dickensian cast of hundreds, its numerous locations, and its convoluted plot. But these attributes are carried so far in *Moo* that the novel produces no characters with whom one can feel any engagement, no situation into which one can be absorbed before one is pulled on to the next scenario.

But if the book was not satisfying as a novel, or as a novel by the author of *A Thousand Acres*, it is of interest in another respect, as previously suggested. This is a big novel about academe: the people, the place, the system; and it is by a woman, thus weighing in as a kind of ultimate update on the tradition, combining and bringing to the fore elements to be seen in Schine and Beattie.

In the mid-nineties, equality more nearly reigns in the glimpses a reader has of the institution which is the stage for the characters’ actions and in the individual relationships enacted against this background. In the personal relationships, it is hard for both characters and readers to tell pursued from pursuer, used from user, object from objectifier. Characters shift as both genders try on a variety of roles. *Moo* suggests men may be nurturers, women can be seducers; men may want to marry and settle down, women may want to hit the road; men may be into cooking or growing things, women may have political and technical know-how. Then again, characters may discard roles or be found to have only been playing at certain parts or
have thought they were in charge only to find out their opposite number was playing an entirely different game than they were. If power is the name of the game, and power is the ability to make things happen, then the university world portrayed in *Moo* is an equal opportunity employer in terms of gender.

The fact that much has changed in the portrayal of the college scene by women is good news, but historically the picture which memoirs and novels by women have painted of higher educational institutions is troubling. As educators we can’t fail to notice a legacy which indicates that, for women, self-esteem and success in the academy have historically been at odds. If Honors Programs have a preponderance of women, then they have an extraordinary opportunity to help create and maintain an atmosphere of equality in which self-esteem is not a gender issue. Who knows, maybe at this very moment the next Pulitzer Prize winning novel set in academe is a germ in the head of a talented honors student.

III

Not so surprisingly, the two memoirs published in 1999 of life in the community that makes up higher education—*In Plato’s Cave* by Alvin Kernan and *My Kitchen Wars* by Betty Fussell—have a number of common elements despite their interesting differences that stem from gender. To begin at the beginning, becoming a college professor is viewed by both these writers as an improvement in social status, an improvement that had as a point of departure World War II.

It was the disruption of the prewar, depression era order of the world and the GI Bill that made it possible for two young people from backgrounds constricted by finances and geography to make it east into the academic “Establishment.” Kernan came back from the war to “the snows of Saratoga, Wyoming, population 650” (1), a stand-in for “Winesburg and Gopher Prairie” (2), to end up at Columbia, Williams, and Yale with a doctoral degree and a professorship. He made it out, literally, in “a decrepit blue 1936 Chrysler…” prone to “wearing out brake linings like Kleenex…” (3). Similarly, post World War II life enabled a young woman from a fanatically puritanical lower-middle-class family in the west to meet and marry a young man from an entirely different background. Fussell’s grandparents, the Harpers, had run a chicken “ranch,” which failed, but her family stayed on in the one-room garage that had become home “on the wrong side of...
Riverside, in a cluster of shanties hard by the cement plant...” (15). Unlike the California of golden dreams, it was “bleak and desolate with grit and dust...” (15), and it was also unlike the California of the man who would remove her from the dust. Paul Fussell came back from the war to his Pasadena family, which also had a vacation house on the Pacific coast. When Betty Harper finally left home, her father gave her a $25 war bond that she cashed in for $18.75. Marriage to Paul Fussell in Cambridge, Massachusetts, where he was working on his Ph.D., brought a lot of sterling silver and Waring blenders. The former they sold; the latter they used to mix drinks.

This suggests two other, perhaps interconnected, aspects of life about which both these writers give a clear picture: the extraordinary amount of heavy drinking that was a part of the teaching scene and the poverty line at which young academics lived. In both cases the writers tell about making do on the GI bill and very little else. Tenement living and macaroni and tuna casseroles were the style of life. In his first job as an Instructor at Yale, Kernan’s salary was $3,500, “too low to qualify for a mortgage on houses that were being bought by truck drivers and factory workers” (83). The dilapidated row house he, his wife and child moved into had an ancient gas water heater that eventually melted down and a coke furnace that “pumped enormous amounts of dust and sulfur up the ducts that ran through the old chimneys and fireplaces...” (83). The dilapidated row house he, his wife and child moved into had an ancient gas water heater that eventually melted down and a coke furnace that “pumped enormous amounts of dust and sulfur up the ducts that ran through the old chimneys and fireplaces...” (83). Also in Connecticut, but starting out at Connecticut College for Women, Paul Fussell earned $2,700 as an Instructor while his wife was paid $800 as an Assistant Instructor. They were given an apartment where “The kitchen at the rear had a fold­down shelf that doubled as a kitchen table and had to be folded up in order to open the oven door. The living room doubled as a dining room and the bedroom doubled as a study...” (85). There were years of struggle for both couples before they arrived at their Yale and Princeton successes.

To help the family along, both Susan Kernan and Betty Fussell followed the common practice of women: doing secretarial work for their husbands and getting similar work in academic offices. But among the men, as Kernan points out, family neglect was endemic. At the same time as they had to take extra jobs to survive, they were struggling to teach, to write and publish so they would be promoted. Alcohol and sexual affairs, he suggests in general, and Fussell supports with particulars, kept faculty from feeling too harshly the conditions of their lives. Despite these significant similarities,
the reactions of Alvin Kernan and Betty Fussell to the expectations and pressures of academe show some interesting differences.

The early reactions of these two writers is a measure of things to come. When Kernan arrives at Williams to complete his undergraduate degree, disillusionment follows: he feels he has landed in F. Scott Fitzgerald land. What counted, he points out, was “family, money, looks, athletic ability, personality. Only very rarely intellect or good nature. Never virtue” (12). Over in Cambridge, on the other hand, Fussell is exhilarated by the opportunity to get a degree from Radcliffe. For her the intellectual stimulation represented a precious opportunity because she felt she was “desperately catching up” (224), even if it meant doing her own academic work in addition to cooking, keeping house, and typing her husband’s work.

The differences continue in their early teaching positions. Kernan portrays the faculty at Yale as an assemblage of dotty alcoholics and the students as another species of being. In his estimation students regarded the faculty as “servants hired by their fathers at low wages to give them culture, to teach them how to write, and to expose them to the small amount of literary polish required by their station in life” (88). But over at Connecticut College For Women, Fussell is entranced to be in the company of some great women professors, such as Rosamond Tuve and Suzanne Langer.

*These women had done their graduate work before the war, at Oxford or Tübingen or the Sorbonne, and had chosen monastic service over marriage and the family....No American university would hire them, certainly none of the Eastern Ivy chain, so they turned their women's colleges into secular monasteries....They were brilliant women whose scholarship was as formidable as their intelligence.* (86-87)

Though she gave birth to a baby, officially named after Shakespeare’s Rosalind but called after Joyce’s “Baby Tuckoo,” she manages to go on with her studies, while continuing to help her husband with his work.

History is on Fussell’s side. As the seventies evolve, she eventually comes to see herself as playing George Eliot’s Dorothea to her Casauban in *Middlemarch*. With that realization, by the eighties she is ready to get herself a small apartment in Greenwich Village and a job—a room of her own and a pay check of her own—because, she says, “I yearned to
TELLING TALES OUT OF SCHOOL

create something permanent, something concrete, to have something to show at the end of a few decades’ hard work. Instead of making a loaf of bread that might keep for a week, I wanted to make a book that would last for years. I wanted a longer shelf life” (203).

It is later in their lives that the divergence in their feelings about the academic life becomes most stark. For Kernan, it was downhill all the way with education from the sixties on. He takes a position at Princeton, interviews for several presidencies, but increasingly feels he is out of tune with the times. In one of his last comments on classroom teaching, he tells of the undergraduate in his Shakespeare course who “complimented me, he thought, by saying at the end of term that I had made the plays sound sufficiently interesting that he hoped that he would have time to read them someday” (240-241). For Betty Fussell, the eighties and nineties are when she is finally hitting her stride as a writer, able to enjoy “my new continent of freedom” (230).

In a sense, their titles tell it all. Kernan’s book is played out in hallowed halls where increasing democratization sheds ever longer shadows. It is a tale of culture wars over intellectual history. Fussell’s work is also about a war, but in this case, because the warrior is a woman, the battleground is the family kitchen and the fight, considerably less abstract, is for a room of her own. While In Plato’s Cave reads like a eulogy for the last great era of higher education, My Kitchen Wars is written in praise of a new era.

Coming back, then, with these memoirs written on the threshold of the twenty-first century, to the question of gender and Honors education, we see a different scene, perhaps a different need than in the books with which I started this article. Unfortunately, gender may still be a factor in the halls of academe, but not in the way earlier narratives indicated. Now it could well be that it is the males among us who need support to believe that humanities education has a meaningful role for them. As grants, careers, jobs, in other words money, has drifted away from the humanities, perhaps the humanities have been left as a level playing field because no one very much cares any more. The job of Honors education may be to make the humanities meaningful regardless of gender.

******

38

JOURNAL OF THE NATIONAL COLLEGIATE HONORS COUNCIL
REFERENCES

Helping Honors Students Improve Critical Thinking

JULIE FISHER ROBERTSON
NORTHERN ILLINOIS UNIVERSITY
AND
DONNA RANE-SZOSTAK
CONSULTANT IN CRITICAL THINKING EDUCATION

Interest in critical thinking (CT) has increased dramatically in the past 25 years. This represents a growing awareness that high school and college graduates often do not have the necessary CT skills to meet the challenges of a changing world. Research shows that college students who take critical thinking courses report their ability to think critically has greatly improved (Block, 1985; Rubinstein, 1980; Rubinstein & Firstenberg, 1987). The preponderance of evidence from assessment studies using control groups indicates that “gains are most pronounced when instruction is specifically designed for the promotion of critical thinking. Critical thinking does not automatically result as a byproduct of standard instruction in a content area” (Halpern, 1996, p. 10).

BACKGROUND

Many colleges and universities in the United States now offer critical thinking courses as part of their general education program (Halpern, 2000). Despite this increased emphasis on critical thinking in higher education, there is a paucity of literature on critical thinking within honors programs. Thus there is a pressing need for adequate evaluation of CT outcomes within honors education.

Development of CT abilities remains central to the concept of critical thinking. CT skills or abilities are defined as the power to do something under circumstances in which there are no constraints to thinking critically and the individual possesses the appropriate background knowledge to apply these abilities (Norris, 1994). CT abilities include interpretation, analysis, evaluation, inference, explanation and self-regulation (The Delphi Report, 1990).
HELPING HONORS STUDENTS IMPROVE CRITICAL THINKING

Many experts believe the disposition to think critically is essential for the application of CT abilities. CT dispositions refer to the tendency to think in a certain way and then choosing to do so (Norris, 1994). After extensive research, Facione, Sanchez and Facione (1994a) identified the following CT dispositions: truth-seeking, open-mindedness, analyticity, systematicity, self-confidence, inquisitiveness and maturity.

The study reported here was designed to evaluate the effects of a critical thinking course on CT skills and dispositions among undergraduate honors students. The objective of this project was to answer the question:

*Can the use of strategies specifically targeted toward critical thinking enhance the already well-developed thinking skills of honors students?*

**METHODS**

**The course**

This course, entitled: “Critical Thinking for Powerful Decision Making,” was the first non-discipline-specific course devoted to the development and application of critical thinking skills at the university in which the study took place. Content focused on material with high emotional and personal appeal with emphasis on CT development through active student participation. By the end of the semester, students were expected to: a) improve their habits for effective and creative thinking; b) critically examine errors in perspective and judgment; c) enhance their ability to identify and solve problems; and d) evaluate their own responses for soundness and validity. Requirements included an issues paper, personal journal, group debate, and individual student participation.

At the beginning of the course, students were randomly assigned to interdisciplinary collaborative groups. These groups of 4-5 students worked throughout the semester on CT projects and reported their viewpoints and perspectives to the class for discussion on a regular basis.

**Evaluation procedures**

Several procedures were utilized to evaluate the effectiveness of the teaching strategies. Students enrolled in the course completed the California Critical Thinking Skills Test (Facione & Facione, 1994) and the California Critical Thinking Dispositions Inventory (Facione, Sanchez & Facione, 1994b) at the beginning and end of the course.
ROBERTSON AND RANE-SZOSTAK

The California Critical Thinking Skills Test (CCTST) is a highly sophisticated test based on the Delphi definition of critical thinking and is a particularly useful evaluation tool in conjunction with a CT course (Rane-Szostak & Robertson, 1996). The California Critical Thinking Dispositions Inventory (CCTDI) is the first objective method to measure the dispositional dimension of CT. It not only identifies the disposition toward thinking critically in each of the identified areas but also indicates opposition to a particular disposition. Both instruments have been used extensively in colleges and universities in the United States and other countries (California Academic Press, 1995).

DATA ANALYSIS

Pre- and post-test differences for the CCTST and CCTDI were analyzed using t-tests. The level of significance for the CCTST was set at $p = 0.1$, whereas significance for the CCTDI was set at $p = 0.05$. The investigators reasoned that, because the students in this seminar were all junior honors students, initial CT skills for this group were projected to be—and in fact were—higher than national norms. This honors group began with a total mean score of 21.16 out of a possible perfect score of 34, in contrast to the national norm for college students of 15.89. Thus, with limited room for gain, the investigators determined that a statistically significant difference of 0.1 between pre-and post-test scores would be appropriate. CT dispositions, on the other hand, were not expected to be—nor were they—markedly different in this honors group than norms for other baccalaureate students. Therefore, the significance level for CT dispositions was set at the more traditional $p = 0.05$.

For both measures, results were analyzed first for the group as a whole, then by major, gender and age. For the analysis by major, students from liberal arts, fine arts, psychology, and professional studies ($n = 9$) comprised the Arts group. Students from computer science, business, accounting, and science ($n = 10$) comprised the Science group. Gender distribution was fairly equal (11 females, 8 males). Because three students were over the age of 30, additional analysis was conducted controlling for age.

In addition to the objective measures noted above, students completed a course evaluation. An evaluation tool, specifically developed for this project, provided both quantitative and qualitative data related to course objectives and personal critical thinking development.

SPRING/SUMMER 2001
HELPING HONORS STUDENTS IMPROVE CRITICAL THINKING

RESULTS

Outcomes of this course were extremely positive. Students showed statistically significant improvement in critical thinking skills as well as in the disposition to use them (Tables 1 & 2).

CRITICAL THINKING SKILLS

The class as a whole demonstrated statistically significant improvement in total score on the CCTST between the beginning and the end of the course \((p = 0.0897)\). Significant improvement in subscale scores was demonstrated in: Inference \((p = 0.0878)\); Reasoning \((p = 0.0610)\); and Deductive Reasoning \((p = 0.0822)\). Results for all measures of the CCTST are summarized in Table 1.

When results of the CCTST were analyzed by major, the Arts group showed non-significant improvement in all areas. The Science group had significant improvement in Deductive Reasoning \((p = 0.0271)\) and non-significant improvement in nearly all other areas. In Evaluation and Inductive Reasoning, scores decreased fractionally; however, this change was not significant.

Mean scores for gender differed from the group as a whole. Females \((n = 11)\) had non-significant improvement in all areas. Males \((n = 8)\), on the other hand, showed significant improvement in overall skills \((p = 0.0942)\), Inference \((p = 0.0246)\), and Reasoning \((p = 0.0698)\). They had non-significant improvement in the remaining subscales.

Further analysis controlled for age. When the three students over the age of 30 were excluded, results were statistically significant only for Deductive Reasoning \((p = 0.0968)\). The remaining group \((n = 16)\) showed non-significant improvement in scores for all other areas.

CRITICAL THINKING DISPOSITIONS

There was dramatic improvement between pre- and post-test scores for the total CCTDI \((p = 0.0001)\) and for all subscales: Truthseeking \((p = 0.0029)\); Open-mindedness \((p = 0.0030)\); Analyticity \((p = 0.0012)\); Systematicity \((p = 0.0042)\); Self-Confidence \((p = 0.0002)\); Inquisitiveness \((p = 0.0034)\); and Maturity \((p = 0.0046)\). Results for all measures of critical thinking dispositions are summarized in Table 2.

In the analysis by major, the Arts Group had statistically significant
improvement from pre- to post-testing for overall CT dispositions and all subscales, except for systematicity. The Science Group improved significantly on all scales, except for Truthseeking and Inquisitiveness. In all areas, mean pre- and post-test disposition scores were higher for the Arts Group than the Science Group.

Gender analysis showed that females (n = 11) improved significantly between pre- and post-testing for the total CCTDI and all subscales, except for systematicity. Scores in Inquisitiveness and Maturity were higher for females at both pre- and post-testing than they were for males. In contrast, the males (n = 8) had higher pre- and post-test mean scores for the total CCTDI, as well as for Analyticity, Systematicity, and Self-confidence, with significant improvement on all scales except for Open-Mindedness and Analyticity. When data were analyzed controlling for age, age was not a significant factor.

**Student Evaluation**

Quantitative student evaluation consisted of Likert-type ratings for several areas of critical thinking. All of the students agreed or strongly agreed that the course provided a framework for thinking logically and critically, and helped increase their CT abilities. Nearly all of the students (18/19) indicated that this course was stimulating, appropriately focused for the development of decision making abilities, helpful in their lives outside the University and taught at a level appropriate for honors students. The vast majority of students (17/19) felt the course was helpful in their other courses and helped them develop a greater understanding of their own values and ethical standards. They did not feel it should have been more discipline specific (Table 3).

For the qualitative evaluation, students were asked to make general comments about the course as a whole. These comments were overwhelmingly positive and indicated students felt the course was of great benefit to them. One person wrote: "...[the course] gave me great insight into the type of thinker I want to become," and another said it was the "most informing honors course I’ve taken."

Students also were asked to indicate strengths and weaknesses of the course and to suggest improvements. Thirty percent of these comments (17/56) focused on how the course had improved critical thinking ability. Students indicated that the course “gave [them] the tools to think critically
HELPING HONORS STUDENTS IMPROVE CRITICAL THINKING

and make better decisions” and that “the most valuable part [was a] greater understanding of [one’s] own values and ethics.” One student wrote “This class overall helped me with my other studies and helped me to think critically about life in general.”

Students cited working in collaborative groups as an important strength of the course (n =13). Comments included: “The group format helped tremendously in making us realize that we are error-making individuals,” and “Working in groups was the best way of helping increase thinking and disposition skills because you were in a diverse group of thinkers and had to provide support for your views.”

Of the 29 comments made about the weaknesses of the course, none related to critical thinking. A key theme was needing more time for class activities. Most of the 28 suggestions for improving the course centered on structure, rather than content. Students suggested increasing the time for group presentations, group debates, and exploring issues.

TEACHING STRATEGIES

Students evaluated specific teaching strategies in relation to increasing their CT skills and dispositions. Working in the same collaborative group, writing an issue paper, and participating in group debates were given the strongest ratings. The “fish bowl” dialogue was also given very high ratings. In this exercise, several students were assigned roles within a group discussion. Other students were observers whose tasks included identifying CT skills used, errors in thinking and the impact of the various roles on a group discussion (Robertson & Rane-Szostak, 1996).

Another strategy was the deliberate creation of a relaxed atmosphere and “safe” environment. This was intended to develop and encourage students’ dispositions to utilize their existing and developing CT skills.

Most of the qualitative responses relating to teaching strategies (n = 34) focused on the environment created within the classroom. Students felt the group format (n = 12), the “interactive and safe environment” (n = 5), and an “innovative,” “hands on” approach (n = 4) were strengths of the course. The use of varied and creative application exercises, such as debates and video discussions to critique, were also considered to be a strength (n = 6). Students said these exercises “… helped me apply critical thinking to my own life,” and “Creativity exercises and lateral thinking were excellent topics to look at problems in new ways.”
CONCLUSIONS

Honors students tend to be good thinkers. However, while they are “intuitively” good thinkers, they may benefit from learning strategies to help them structure their critical thinking for more consistency. The statistically significant improvement on the skills test, from the already high initial scores to a mean of 22.47 after intervention, suggests that, for this group, that was indeed the case.

In evaluating these results in terms of the disposition to use CT, it is important to keep in mind that nearly all pre-test scores on the total CCTDI were higher than the normative cut off score of 280. This suggests these honors students did not have serious dispositional deficiencies. However, in looking at the subscales of this instrument, several students initially scored below the normative cut off of 40 for Truthseeking, Systematicity, Self-confidence, Inquisitiveness, and Maturity. Scores below 40 suggest potential opposition to these dispositions, which is fairly typical of college students. College students are generally open-minded and have little difficulty acknowledging others’ viewpoints. However, they are less likely to critically examine viewpoints that differ from their own in an effort to uncover “truth.” College students also exhibit less self-confidence and maturity than later in life (Facione, Sanchez & Facione, 1994).

Interestingly, on the dispositions post-test, total scores for these honors students increased dramatically—approaching a mean of 350. These later scores suggest strength in all dispositional areas. Also, far fewer students scored below the 40-point cut off on the above subscales. Their improvement appears directly related to this critical thinking course. Maturation should not have been a major factor after just one semester at the junior level.

In comparing majors, the Arts and the Science groups differed considerably in terms of skills and dispositions. The Science group had higher mean scores for the total CCTST and the Evaluation, Reasoning and Deductive Reasoning subscales. In contrast, the Arts group had higher mean scores in all dispositional areas. Perhaps this reflects the more structured view of the world imposed by the precise theoretical nature of science.

There were also gender and age differences on both CT skills and dispositions. Even though both men and women improved their overall and subscale scores on the CCTST from the beginning to the end of the
HELPING HONORS STUDENTS IMPROVE CRITICAL THINKING

course, the men consistently scored higher than the women on the total test and all subscales. The men also had statistically significant improvement in total score to a mean of 24.25—nearly ten points above the national average. In the area of dispositions, men were more analytical, systematic, and self-confident, whereas women were more mature and inquisitive. It is interesting to note that all six scores below the normative cut off score on the Self-confidence scale were from women. These gender differences may be a result of socialization and imposed roles within our society. Age was only a factor for skills; it did not appear to have any influence on dispositions.

This study provides information potentially useful for the improvement of honors education. In courses not specifically devoted to CT, specific strategies to develop these skills and an atmosphere encouraging critical thinking should enhance the development of both CT skills and dispositions. However, as the literature suggests, gains are expected to be most pronounced following a specific course in critical thinking. The outcomes of this project suggest that, even for honors students, an emphasis on specific CT strategies can help to significantly improve critical thinking skills and the disposition to use them.

*******

The authors may be contacted at

School of Nursing
Northern Illinois University
1240 Normal Road
DeKalb, IL  60115

email: jrobertson@niu.edu
### Table 1

**California Critical Thinking Skills Test**

<table>
<thead>
<tr>
<th></th>
<th>All Students (n=19)</th>
<th>Arts Group (n=9)</th>
<th>Science Group (n=10)</th>
<th>Male Gender (n=8)</th>
<th>Female Gender (n=11)</th>
<th>Age &lt; 30 (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>21.26</td>
<td>20.56</td>
<td>21.90</td>
<td>22.88</td>
<td>20.09</td>
<td>20.88</td>
</tr>
<tr>
<td>Test 2</td>
<td>22.47</td>
<td>22.11</td>
<td>22.80</td>
<td>24.25</td>
<td>21.18</td>
<td>21.88</td>
</tr>
<tr>
<td>Maximum = 34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0897*</td>
<td>0.1746</td>
<td>0.1584</td>
<td>0.0942*</td>
<td>0.2146</td>
<td>0.1635</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>5.32</td>
<td>5.56</td>
<td>5.10</td>
<td>5.75</td>
<td>5.00</td>
<td>5.25</td>
</tr>
<tr>
<td>Test 2</td>
<td>5.79</td>
<td>5.89</td>
<td>5.70</td>
<td>5.88</td>
<td>5.73</td>
<td>5.63</td>
</tr>
<tr>
<td>Maximum = 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.1439</td>
<td>0.3098</td>
<td>0.1644</td>
<td>0.4252</td>
<td>0.1167</td>
<td>0.2226</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>8.68</td>
<td>7.89</td>
<td>9.40</td>
<td>9.50</td>
<td>8.09</td>
<td>8.50</td>
</tr>
<tr>
<td>Test 2</td>
<td>8.95</td>
<td>8.56</td>
<td>9.30</td>
<td>9.75</td>
<td>8.89</td>
<td>8.69</td>
</tr>
<tr>
<td>Maximum = 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.3071</td>
<td>0.1802</td>
<td>0.4475</td>
<td>0.3341</td>
<td>0.3681</td>
<td>0.3801</td>
</tr>
<tr>
<td><strong>Inference</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>7.26</td>
<td>7.111</td>
<td>7.40</td>
<td>7.63</td>
<td>7.00</td>
<td>7.13</td>
</tr>
<tr>
<td>Test 2</td>
<td>7.84</td>
<td>7.69</td>
<td>7.80</td>
<td>8.88</td>
<td>7.09</td>
<td>7.56</td>
</tr>
<tr>
<td>Maximum = 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0878*</td>
<td>0.1503</td>
<td>0.1997</td>
<td>0.0246*</td>
<td>0.4357</td>
<td>0.1834</td>
</tr>
<tr>
<td><strong>Reasoning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>19.11</td>
<td>18.22</td>
<td>19.90</td>
<td>20.88</td>
<td>17.82</td>
<td>18.69</td>
</tr>
<tr>
<td>Test 2</td>
<td>20.26</td>
<td>19.78</td>
<td>20.70</td>
<td>22.13</td>
<td>18.91</td>
<td>19.75</td>
</tr>
<tr>
<td>Maximum = 30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0610*</td>
<td>0.1404</td>
<td>0.1050</td>
<td>0.0698*</td>
<td>0.1722</td>
<td>0.1070</td>
</tr>
<tr>
<td><strong>Deductive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>10.11</td>
<td>9.78</td>
<td>10.40</td>
<td>11.25</td>
<td>9.27</td>
<td>9.81</td>
</tr>
<tr>
<td>Test 2</td>
<td>10.84</td>
<td>10.33</td>
<td>11.30</td>
<td>12.25</td>
<td>9.82</td>
<td>10.50</td>
</tr>
<tr>
<td>Maximum = 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0822*</td>
<td>0.2919</td>
<td>0.0271</td>
<td>0.1262</td>
<td>0.2111</td>
<td>0.0968*</td>
</tr>
<tr>
<td><strong>Inductive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>9.05</td>
<td>8.44</td>
<td>9.60</td>
<td>9.63</td>
<td>8.64</td>
<td>8.94</td>
</tr>
<tr>
<td>Maximum = 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.2368</td>
<td>0.1139</td>
<td>0.3755</td>
<td>0.3780</td>
<td>0.2551</td>
<td>0.2931</td>
</tr>
</tbody>
</table>

* = Significant (p = < 0.1)

**Spring/Summer 2001**
## Helping Honors Students Improve Critical Thinking

### Table 2

<table>
<thead>
<tr>
<th></th>
<th>All Students (n=19)</th>
<th>Arts Group (n=6)</th>
<th>Science Group (n=10)</th>
<th>Male Gender (n=8)</th>
<th>Female Gender (n=11)</th>
<th>Age &lt;30 (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>318.89</td>
<td>328.56</td>
<td>310.20</td>
<td>325.88</td>
<td>313.82</td>
<td></td>
</tr>
<tr>
<td>Test 2</td>
<td>349.11</td>
<td>366.56</td>
<td>333.40</td>
<td>350.50</td>
<td>348.09</td>
<td></td>
</tr>
<tr>
<td>Maximum =420</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0001*</td>
<td>0.0032*</td>
<td>0.0088*</td>
<td>0.0014*</td>
<td>0.0046*</td>
<td>0.0005*</td>
</tr>
<tr>
<td><strong>Truthseeking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>41.89</td>
<td>43.00</td>
<td>40.90</td>
<td>42.75</td>
<td>41.27</td>
<td>40.56</td>
</tr>
<tr>
<td>Test 2</td>
<td>47.63</td>
<td>51.67</td>
<td>44.00</td>
<td>46.75</td>
<td>48.27</td>
<td>46.69</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0029*</td>
<td>0.0131*</td>
<td>0.0681</td>
<td>0.0377*</td>
<td>0.0187*</td>
<td>0.0062*</td>
</tr>
<tr>
<td><strong>Open-mindednes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>47.32</td>
<td>49.00</td>
<td>46.20</td>
<td>49.00</td>
<td>46.82</td>
<td>47.13</td>
</tr>
<tr>
<td>Test 2</td>
<td>51.53</td>
<td>54.33</td>
<td>50.00</td>
<td>50.75</td>
<td>52.09</td>
<td>51.13</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0030*</td>
<td>0.0103*</td>
<td>0.0064*</td>
<td>0.0613</td>
<td>0.0013*</td>
<td>0.0013*</td>
</tr>
<tr>
<td><strong>Analyticity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>45.58</td>
<td>46.22</td>
<td>45.00</td>
<td>48.88</td>
<td>43.18</td>
<td>44.81</td>
</tr>
<tr>
<td>Test 2</td>
<td>49.84</td>
<td>52.00</td>
<td>47.90</td>
<td>51.38</td>
<td>48.73</td>
<td>49.25</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0012*</td>
<td>0.0094*</td>
<td>0.0388*</td>
<td>0.0889</td>
<td>0.0038*</td>
<td>0.0023*</td>
</tr>
<tr>
<td><strong>Systematicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>43.74</td>
<td>45.11</td>
<td>42.50</td>
<td>45.63</td>
<td>42.36</td>
<td>42.31</td>
</tr>
<tr>
<td>Test 2</td>
<td>47.11</td>
<td>48.56</td>
<td>45.80</td>
<td>49.13</td>
<td>45.64</td>
<td>45.75</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0042*</td>
<td>0.0067</td>
<td>0.0138*</td>
<td>0.0128*</td>
<td>0.0506</td>
<td>0.0092*</td>
</tr>
<tr>
<td><strong>Self-confidence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>44.47</td>
<td>45.22</td>
<td>43.80</td>
<td>46.25</td>
<td>43.18</td>
<td>43.63</td>
</tr>
<tr>
<td>Test 2</td>
<td>50.16</td>
<td>52.22</td>
<td>48.30</td>
<td>51.88</td>
<td>48.91</td>
<td>49.69</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0002*</td>
<td>0.0020*</td>
<td>0.0024*</td>
<td>0.0025*</td>
<td>0.0114*</td>
<td>0.0006*</td>
</tr>
<tr>
<td><strong>Inquisitiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>48.58</td>
<td>50.33</td>
<td>47.00</td>
<td>47.50</td>
<td>49.36</td>
<td>47.56</td>
</tr>
<tr>
<td>Test 2</td>
<td>52.37</td>
<td>54.44</td>
<td>50.50</td>
<td>53.43</td>
<td>53.64</td>
<td>51.38</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0034*</td>
<td>0.0124*</td>
<td>0.0563</td>
<td>0.0264*</td>
<td>0.0282*</td>
<td>0.0083*</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test 1</td>
<td>47.32</td>
<td>49.67</td>
<td>45.20</td>
<td>46.88</td>
<td>47.64</td>
<td>46.63</td>
</tr>
<tr>
<td>Test 2</td>
<td>50.47</td>
<td>53.33</td>
<td>47.90</td>
<td>50.00</td>
<td>50.82</td>
<td>49.44</td>
</tr>
<tr>
<td>Maximum = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>0.0046*</td>
<td>0.0345*</td>
<td>0.0443*</td>
<td>0.0255*</td>
<td>0.0428*</td>
<td>0.0216*</td>
</tr>
</tbody>
</table>

* = Significant at p = < 0.05
### Table 3

#### Student Evaluation of Course Content

<table>
<thead>
<tr>
<th>The content of this course:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) was sufficiently stimulating to hold my interest.</td>
<td>1</td>
<td>13</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>2) was at an appropriate level for honors students.</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>3) was appropriately focused to help me further develop my decision making abilities.</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>4) provided me with a framework for thinking logically and critically.</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>5) helped me increase my abilities to think logically and critically.</td>
<td>2</td>
<td>10</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>6) helped me develop a greater understanding of my own values and ethical standards.</td>
<td>1</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>7) has been helpful to me in other courses I am taking this semester.</td>
<td>1</td>
<td>11</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>8) has been helpful to me in my life outside of the University.</td>
<td>1</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>9) was too general to be of use in my career. It should have been more specific to my chosen discipline.</td>
<td>1</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

*ROBERTSON AND RANE-SZOSTAK*

SPRING/SUMMER 2001
HELPING HONORS STUDENTS IMPROVE CRITICAL THINKING

REFERENCES


JOURNAL OF THE NATIONAL COLLEGIATE HONORS COUNCIL
I had a very disturbing experience a few months ago—one might almost call it a crisis of faith—while leafing through the financial pages of my daily newspaper. Confronted with column after column of virtually indecipherable NASDAQ, NYSE and AMEX stock quotations—and even more nonplussed by articles which made reference to such things as “put” and “call” options, small cap growth funds, and companies taking “poison pills” to avoid a hostile takeover—I realized in a flash of depressing insight that I was one of this nation’s economic illiterates.

Probably I have been aware of this for some time—no doubt it explains why I enjoy visits with my financial planner about as much as I do trips to the dentist, and why filling out a Form 1040 every year makes my palms sweat. Like those who cannot read, economic illiterates live in constant fear of the day they might be found out—as when the conversation at a social gathering turns unexpectedly toward the pros and cons of no-load mutual funds, or when someone asks at work whether I’m leaning toward stocks or inflation-adjusted bonds this year.

Particularly unsettling to me this day, however, was not just the sudden awareness of my own ignorance of economics, but the fact that—just a week earlier—I had lectured to a class of graduate students in education about the inexcusable extent of science illiteracy in our country today and what dangers it posed for our post-industrial, technology-oriented society.

It was appalling, I had told them, that almost forty percent of adult Americans believe that rocket launchings cause changes in our weather;
that fifty percent do not believe in evolution; and that sixty percent have absolutely no understanding of what DNA is or what it does. How could our democratic institutions survive in an age of exploding science and technology, I had asked, given such widespread ignorance?

Alas, just a few days later I found myself confronted with—and confounded by—a host of terms and concepts that had little if any meaning for me: price-earnings ratios and liquidation dividends; split-stock options and commodities futures; and, yes, “poison pills.” Was I, through my own lack of knowledge about these matters, also contributing to an uncertain and possibly precarious future for our nation? Or at least my own future? And as a scolding science teacher, was I being hypocritical?

**THE DILEMMA OF SCIENCE LITERACY**

When I left my job as a research scientist sixteen years ago to pursue a new career in undergraduate teaching, including that of future pre-college science teachers, the “science literacy” movement was all the rage. Alarmed by declining science and mathematics test scores among U.S. middle school and high school students as well as the results of a variety of polls which indicated a severe level of science illiteracy among the adult American public, many scientists and science educators were calling for new initiatives on the part of the education community to help address these deficiencies.

The (first) Bush administration responded in 1989 with its “America 2000” agenda which, among other goals, vowed to make U.S. students “first in the world” in science and mathematics by the turn of century and to insure that every American citizen was literate enough in science to make responsible political decisions. This latter goal was seen as a particularly critical point since, as E. O. Wilson (among others) has pointed out:

...half the legislation coming before the United States Congress contains important scientific and technological components. Most of the issues that vex humanity daily—ethnic conflict, arms escalation, overpopulation, abortion, environment, endemic poverty, to cite several most persistently before us—cannot be solved without integrating knowledge from the natural sciences with that of the social sciences and the humanities (Wilson, 1998).
DAIL MULLINS


As a novice science educator I jumped quickly onto the science literacy bandwagon—writing articles for journals and newspapers supporting the idea; developing and administering my own science literacy questionnaires (Armstrong, et al, 1992; Mullins, 1993); raising the issue again and again in my classes; and giving talks before lay and academic audiences about the dangers we face from widespread ignorance about both the findings and methodologies of modern science. Increased and more widespread science literacy, I argued, would change all this.

And so it would. But from the beginning there remained the nagging questions of what exactly constitutes “science literacy” and whether it can actually be achieved among the non-science public. Does “science literacy” imply that all citizens should have at least a general familiarity with the vocabulary, findings, and theories of the major branches of natural science—physics, chemistry, earth science, and biology—and if so, just how detailed should this knowledge be? And should science literacy also include, as George Mason University scientists Robert Hazen and James Trefil (1991) suggest, some knowledge of the methodology, history and philosophy of science?

Some science educators—most notably Morris Shamos (1995), past president of the National Science Teachers Association, and Keith Devlin (1998), Dean of Science at St. Mary’s College of California and a senior researcher at Stanford University—have broken ranks with the proponents of this rigorous interpretation of science literacy, suggesting instead that a far more reasonable objective might be to try to instill some measure of “science appreciation,” or “science awareness,” in our students, much after the fashion of music and art appreciation courses. As Devlin himself has confessed in the pages of the *Chronicle of Higher Education*:

*I neither know nor understand most of present-day science. And yet, I am dean of science at a private college, an active researcher, and the author of several mathematics textbooks and science books for the general reader. But scientific knowledge has been advancing at such a pace...that I cannot hope to keep up. No one can* (Devlin, 1998).
SCIENCE LITERACY AND THE UNDERGRADUATE SCIENCE CURRICULUM

The goal then would not be to demand a thorough knowledge of the content of science—its facts, figures, and formulas—but rather, as Hazen and Trefil (1991) suggest, “...the knowledge [one needs] to understand public issues...the less precise knowledge used in political discourse”: just the kind of knowledge, they imply, required to make sense of science reports in daily newspapers, weekly news magazines, and television news shows, so as to allow personal and political decisions to be based upon what understanding of such matters can be gleaned from these sources.

As a scientist, I sometimes feel this new “fall-back” position to be one of defeat and premature resignation to a lesser, more nebulous goal. A problem with the language of “political discourse,” for example, is that a term such as “global warming”—without being able to comprehend and critically evaluate the relevant data—can often be construed to mean “environmental extremism.” In my role as a science teacher, however, the idea occasionally smacks of some practicality and perhaps even achievability.

But this scenario, of course, raises again the uncomfortable specter of my own economic illiteracy. After all, it was not my ignorance of terms in the glossary of a college-level economics textbook that befuddled me, but those I found within the pages of my own newspaper! Since any current knowledge I possess of economics—last encountered as an academic subject in high school forty years ago—comes mostly from various electronic and print news media, I can say with some certainty that I have doubts about the efficacy of these media sources as teaching tools were they to be an anticipated component of the solution. More than anything else they seem to lack the “organization” and “pedagogical continuity” of more formal academic curricula. But this then puts the onus for imparting science literacy back on our schools, colleges, and teaching faculty, and so we seem to have come full circle.

COMPROMISE

I wish to propose a compromise, of sorts, between these two positions—on the one hand, the seemingly unrealistic expectations of those who argue for a quite rigorous definition of science literacy acquired through an improved standard curriculum in high school and college science coursework and, on the other, the oft-perceived laxity of approaches (i.e., “watered down”) favored by advocates of “science appreciation.” To my mind, part of a solution to this dilemma lies first in precisely defining just
what science it is we would like our citizens to come to appreciate, and then redesigning the pre-college and undergraduate science curricula to reflect this definition.

In 1991, Hazen and Trefil published *Science Matters: Achieving Science Literacy*, a book that elaborated upon an earlier letter of theirs which appeared in the journal *Science*. In their book, the authors presented an overview of what they believe to be the twenty most important findings, or principles, of contemporary science (*Table 1*). Actually, two of these date from the time of classical Greece—the belief that the universe is regular and invariant in its behavior, and hence comprehensible; and the idea that matter is not infinitely continuous in dissection, but eventually yields up fundamental particles which we call atoms (*from atomos, meaning “not to cut”*)—and another (Newton’s Laws of Motion) was formulated during the seventeenth century. All of the others, however—from the Laws of Thermodynamics to the realization that all life forms on earth are based on the same genetic code—can be attributed to the work of scientists in the nineteenth and twentieth centuries.

It can be argued—convINCingly I believe—that anyone claiming to be scientifically literate ought to have not only a vague awareness of these twenty topics, but a fuller appreciation of their scope and real meaning. Much is hidden, of course, in the seeming simplicity of such a cursory list: to understand that scientists believe the universe to be “regular and predictable,” for example, requires that one have some knowledge of the methodology employed in exploiting this belief (the so-called “scientific method”) and some familiarity with its history and development, not to mention its pitfalls. Alas, it seems clear that few if any non-science graduates from our colleges and universities possess such an awareness or appreciation, a fact that I believe can be attributed to a variety of problems associated with post-secondary science education, not the least of which is the nonsensical nature of most so-called “core curriculum,” or “general studies,” requirements. It is even more depressing to contemplate the fact that many science majors and even scientists themselves may be ignorant of even the barest outlines of Hazen and Trefil’s full list.

At the University of Alabama at Birmingham (UAB), as at most four-year institutions, all undergraduate students are required to satisfy a set of “Core Curriculum” requirements that, according to the university’s catalogue of undergraduate programs, are intended “to provide a nucleus
SCIENCE LITERACY AND THE UNDERGRADUATE SCIENCE CURRICULUM

around which students can build an educational experience that will improve the quality of their lives” (UAB Catalogue of Undergraduate Studies, 1999-2001). One of these requirements, of course, is in the area of science and technology, which stipulates that graduates of UAB “will understand the scientific process and the influence of science and technology on society.” No mention of specific and desired content knowledge is mentioned in the undergraduate catalogue. This curricular goal is to be satisfied by taking eight semester hours in the natural sciences, with the single stipulation that all courses include a laboratory experience, although many programs (e.g., elementary education) also require that students fulfill this goal by taking a mix of courses from the life and physical sciences.

To this day—nearly a decade after the implementation of the Core Curriculum—I find myself dumbfounded by the claims of those who believe these requirements actually result in graduates who “understand the scientific process and the influence of science and technology on society,” much less have even a minimal grasp of the facts, findings and theories of contemporary science. As a means of allowing students the opportunity to broaden their intellectual experiences and perhaps discover areas of academic interest they might otherwise not, the Core Curriculum no doubt serves a useful and important function. But I have argued since its inception that the Core Curriculum in the natural sciences does not at all satisfy the above philosophical premises of the core; does not acquaint students with even a fraction of the content knowledge available in all the natural sciences; and may in fact help perpetuate the antipathy and aversion toward science which many students develop and refine during their pre-college educational experience.

In most instances, non-science majors will opt first for a course in introductory biology, plus an associated lab, and then perhaps a physical geology or introductory, non-calculus based physics course, again with an associated laboratory experience. In both cases, the determining factor seems to be the extent to which the courses are perceived to be free of a rigorous quantitative component. In any event, at least two of the four broad categories of natural science will be ignored, with the result that students are left unable to make important connections between these, as is essential for understanding innately interdisciplinary (and politically relevant) fields such as environmental science.

One possible solution to this dilemma might be to scrap the current
Core Curriculum requirement of two (or more) distinct introductory
disciplinary science courses and substitute these with a completely
redesigned, two-semester interdisciplinary course in the natural sciences
which would introduce students to all four basic disciplines—physics,
chemistry, earth science, and biology— vis à vis the list of major scientific
understandings about the world as presented by Hazen and Trefil. As a
prerequisite, students might be required to fulfill whatever mathematics
requirements are currently in place for non-science majors. Except in some
rare cases, this would almost certainly necessitate that the physics and
chemistry components of such a course be non-calculus based, though I
do not see this as a major impediment to the goal of familiarizing students
with a broad overview of our modern scientific understanding of “how the
world works.”

In a two-part article in the fall and winter of 1994-95, in the pages of
the National Honors Report (Mullins, 1994; 1995), I described the
conceptualization, development and implementation of just such a core
course for students in the Honors Program at UAB. Titled The Mythology
of Western Scientific Materialism: The Evolutionary Epic, the course
was designed around E. O. Wilson’s concept of the “Evolutionary Epic”—
our science-based culture’s contemporary understanding of the origin,
evolution, and possible fate of the universe, as well as that of our solar
system, the earth itself, and life on our planet, including the human species.
In these articles I outlined the basic format of the course, here reproduced
as Table II. It should be noted that I have not included—mainly for the
purpose of brevity—several additional lectures and class discussion sessions
which dealt with relevant literary and philosophical matters. They would
likely not be included in an interdisciplinary science course in any event.

I offer this outline only as a suggestion for the kind of course I have in mind
for all undergraduate non-science majors. Other Honors programs have
experimented with similar kinds of interdisciplinary offerings in natural science,
though perhaps not as Core Curriculum requirements. I suspect that such
curricular innovations are rare beyond the confines of such unique academic
units (although Auburn University in Alabama has long taught “The Human
Odyssey,” a non-Honors science and humanities-based interdisciplinary
course which can be used to satisfy some general studies requirements).

Yet another approach might be to require all undergraduate students—
in lieu of disciplinary course selections—to complete a specially designed,
two-semester course in environmental science, a topic explored in the UAB Honors Program’s nine-semester-hour fall 2000 interdisciplinary offering. In my opinion, there are three principal advantages to constructing an undergraduate core curriculum science requirement around such a theme:

• With the possible exceptions of impending revolutions in molecular genetics and artificial intelligence, no other topic is more likely to dominate the interface between science, society, and politics during the twenty-first century than the issue of the environment;
• The topic of the environment lends itself handily to an interdisciplinary format, allowing for the incorporation of both theoretical and practical knowledge culled from the fields of physics, chemistry, earth and space science, and biology;
• Such a theme would allow for the ready incorporation of both laboratory and field research experiences, pedagogic items which many science educators believe vital to achieving an understanding of the “ways and means” of contemporary science among students.

In addition, there are already several excellent “Environmental Science” textbooks on the market (some with an extensive “on-line” component), and my own contacts with various academic publishing firms suggest that several more are in the offing (Arms, 1990; McKinney and Schoch, 1998; Chiras, 2001). Although most of these texts are written by scientists with specialized training in the earth and life sciences, all can easily be supplemented by material in general and organic chemistry, physics, and the space sciences.

**In Conclusion**

There are no doubt many reasons for a general lack of curricular experimentation in basic science Core courses, though I suspect that most have to do with the reluctance of many science teaching faculty to cooperate across disciplinary boundaries for a variety of reasons: credit-hour production concerns or a fear of losing potential majors; a general lack of non-research based inter-departmental communication; and the problems of instructional compensation associated with interdisciplinary efforts in general. Whatever the reasons, it seems clear that, from the standpoint of achieving even a modicum of science literacy—or even
DAIL MULLINS

science appreciation—across the full breadth of the natural sciences among a majority of our collective graduates, what we are doing now is not working, and it may be time to try a new tactic.

Most working research scientists are well aware of the fact that the old disciplinary boundaries between the natural sciences—physics, chemistry, biology, earth sciences—are fast becoming obsolete. In the laboratory setting today, such specialists as molecular biologists, quantum physicists, organic chemists, computer scientists, and ecologists can frequently be found cooperating on a variety of complex projects including environmental science, sub-tropical health issues, and the photo-reconnaissance and surface sampling of other worlds. It is perhaps time that we recognize this “blurring” of disciplines within our science classrooms as well.

No other academic units on our various campuses seem as poised to pioneer such changes as do Honors Programs. While most do not have the capacity to effect major changes, if any, in Core Curriculum requirements, many have the freedom to experiment with and perhaps “test” new curricula, and to try to model what educators refer to as “best practices.” As Sam Schuman points out in his essay later in this issue (Cultivating: Some Thoughts on NCHC’s Future):

...real excellence in undergraduate teaching and learning requires a certain daring, a willingness to experiment. Liberal education demands the liberation of open minds. While respecting and cherishing classical texts and classroom techniques which time has proven valuable and effective, we need to be the advocates as well of the risky, the new, the untried.

In our undergraduate introductory science curricula, it seems to me time to try the risky, the new, and the untried.

******

The author may be contacted at

UAB Honors Program
University of Alabama at Birmingham
1190 10th Avenue South
Birmingham, AL 35294-4450
email: drdoom@uab.edu

SPRING/SUMMER 2001
**Science Literacy and the Undergraduate Science Curriculum**

**Table I**

Hazen and Trefil (1991) contend that most scientists will basically agree on which are the most important and fundamental ideas underlying all of contemporary science:

1. The universe is regular and predictable
2. One set of laws describes all motion (Newton’s Three Laws of Motion)
3. Energy is conserved (First Law of Thermodynamics)
4. Energy always goes from more useful to less useful forms (Second Law of Thermodynamics)
5. Electricity and magnetism are two aspects of the same force (electromagnetism)
6. Everything is made of atoms
7. Everything—particles, energy, the rate of electron spin—comes in discrete units, and you can’t measure anything without changing it
8. Atoms are bound together by a kind of electron “glue”
9. The way a material behaves depends on how its atoms are arranged
10. Nuclear energy comes from the conversion of mass
11. Everything is really made of quarks and leptons
12. Stars live and die like everything else
13. The universe was born at a specific time in the past, and it has been expanding ever since
14. Every observer sees the same laws of nature (Einstein’s Special and General Theories of Relativity)
15. The surface of the earth is constantly changing, and no feature on earth is permanent
16. Everything on earth operates in cycles
17. All living things are made from cells, the chemical factories of life
18. All life is based on the same genetic code
19. All life forms evolved by natural selection
20. All life is connected
DAIL MULLINS

Table II
The Mythology of Western Scientific Materialism: The Evolutionary Epic

Introduction
• An Overview of Mythological Narratives, Religion and the Evolutionary Epic
• Science Illiteracy and the Science Education Crisis
• The Origin and Evolution of Science
• The Scientific Method

In the Beginning…
• Creation Mythologies
• The Large Scale Structure of the Universe
• The Origin, Evolution and Fate of the Universe
• The Motion of Waves
• Light and the Electromagnetic Spectrum
• Stars and Galaxies
• Atomic Theory and the Periodic Table
• The Subatomic Structure of Matter
• The Conservation of Momentum
• The Calculus
• The Conservation of Matter and Energy
• 1895-1925: Thirty Years that Shook Physics
• Albert Einstein and the Theory of Relativity
• Fundamentals of Quantum Theory
• The Copernican Revolution

Terra Firma
• The Origin of the Earth and Solar System
• The Grand Tour
• The Earth Inside and Out: Igneous, Sedimentary and Metamorphic Rocks
• The Age of the Earth
• Continental Drift and Plate Tectonics
• Earthquakes and Volcanoes
• Meteorology
• Climatology

SPRING/SUMMER 2001
SCIENCE LITERACY AND THE UNDERGRADUATE SCIENCE CURRICULUM

A Small Warm Pond…
- Chemical Bonding
- Stoichiometry and the Concept of the Mole
- Chemical Reactions
- Acids, Bases and Salts: All About pH
- The Origin of Life on Earth
- The Living Cell
- Charles Darwin: The Man, His Time and His Theory
- The Evolution of Life on Earth
- Biological Taxonomy
- Energy and Food Chains
- Mendelian Genetics
- 1900-1953: Fifty Years that Shook Biology
- DNA, RNA and the Central Dogma of Molecular Biology
- The KT Event: The Return of Catastrophism
- The Origin and Evolution of the Human Species
DAIL MULLINS

LITERATURE CITED


FORUM ON HONORS AND HIGHER EDUCATION

[The essay by Sam Schuman that begins the “Forum on Honors and Higher Education” was circulated to the NCHC membership with an invitation to respond in an essay of roughly equal length. The five responses, along with Schuman’s essay, comprise the Forum. JNCHC will from time to time sponsor such a Forum in future issues. Members are invited to submit essays that, like Schuman’s, would stimulate thought and written responses from other members.]
Cultivating:
Some Thoughts on NCHC’s Future

SAMUEL SCHUMAN
UNIVERSITY OF MINNESOTA, MORRIS

At the Fall, 2000, meeting of the NCHC in Washington, DC, the closing plenary session focused on “The Future of NCHC.” It was a worthwhile session, ably organized and chaired by Ada Long, in which several thoughtful participants made interesting and valuable observations and suggestions. Unfortunately, the plenary session was scheduled for late in the morning of the last day of the meeting, so many conference attendees faced the choice of concentrating on NCHC’s future…or their own. Reasonably enough, most opted for the latter by departing the meeting, hotel and city prior to the panel presentation.

In the paragraphs below, I reiterate my remarks from that session, not because they were particularly memorable, nor, certainly, because they were any more thoughtful than those of the other speakers. Rather, the rationale for wider dissemination lies in a somewhat radical approach to a topic of general interest to us all. I propose a fairly dramatic revision of our organizational mission, a kind of institutional “knight’s move” or swerve for NCHC, which I hope it might be useful for us to ponder together.

The NCHC began its institutional life under a different moniker: the Inter-University Committee on the Superior Student. Although many of us may cringe a bit at the out-front elitism of a phrase like “the superior student,” that is, in fact, an accurate description of the initial focus of our organization. And, in the context of the history of American higher education, that “initial focus” was defined not really all that long ago: the ICSS was created between 1964 and 1966, when, for example, I had already graduated from college. My point is that we are a fairly new organization, much too young to be inflexible about our mission, constituencies, vision, directions.
CULTIVATING: SOME THOUGHTS ON THE NCHC’S FUTURE

Today, providing opportunities for superior students remains our dominant emphasis. Individually and collectively, our Honors Programs and our state, regional and national organizations exist primarily to provide instructional options of enriched content and rigor to students of above-average talent and/or motivation. NCHC needs to ask if it is time to expand, radically, that mission. First, though, let me be quite clear that I do not think there is anything wrong with offering challenging academic programs to students who seek and can succeed in them. Our institutions and their students would be much poorer if we failed to provide those exceptional offerings to exceptional—swallow—“superior”—students.

Many of our programs, and to a very limited extent our honors organizations, have tried to push a bit beyond this notion of superior offerings for superior students, but we have not pushed very hard, nor gotten very far. What excites me about the future of Honors is the opportunity to move much much further in this direction.

My very first national Honors conference, attended by a couple hundred vibrant young faculty and administrators, now all old codgers like me, was in Williamsburg, VA., some three decades ago. The theme of that conference was something like “Honors as the cultivation of excellence.” It is astonishing that this thematic phrase has stuck with me all this time, but that is because this definition of Honors resonated deeply for me then, and continues to inspire me today. My point, of course, is that there is nothing here about just cultivating excellent students (although there is nothing about not doing so, either). Just cultivating excellence.

We restrict ourselves to one, rather small, albeit important, opportunity to cultivate excellence if we define ourselves as offering superior programs for superior students. There is no rule that we need to restrict ourselves in this fashion. Why can’t an Honors Program, for example, in the name of cultivating excellence see as part of its mission sponsoring a lecture series on campus featuring some of the most exciting faculty from campus, giving excellent, stimulating, exciting talks... for anyone who wanted to attend. How about sponsoring other extracurricular or co-curricular events which brought absolutely top quality intellectual or cultural programs to the college or university. Why not have the Honors Program as part of the recognition system for seeking and rewarding excellence in instruction and/or scholarship in the faculty. Or the student body. Even more radical, why can’t Honors Programs recognize and reward excellence beyond the
SAMUEL SCHUMAN

academic program of the campus: in student services or campus staff. It is interesting to imagine an “Honors Program award for excellence in University service” going to a beloved and diligent food service worker or maintenance person.

I hope this all does not just seem the equalitarian fantasy of an aging child of the 60’s. It seems to me that there is, actually, a reasonable and hard-boiled theoretical underpinning to these utopian notions.

There have been countless shifts in American Higher Education in the years since Joseph Cohen founded the ICSS. Pollyanna that I am, I think most of them are good. Our institutions are more varied; our populations of students, staff and faculty are much more diverse; electronic instructional tools which were beyond imagination have become commonplace; we have come to recognize differences in learning styles across student populations; new pedagogies and new subject matters have been introduced and accepted into academe; etc. There have, though, been costs, and the one which concerns us here is that the assumption of excellence has been weakened, if not lost. It seems we have drifted towards a culture of mediocrity. Or, if that is putting it too dramatically, a collegiate culture where, too often, doing OK... is OK. Turning in most of your work in a class is good enough. Getting most of those financial aid award letters right is good enough. Keeping things pretty clean is clean enough. Actually showing up to teach almost all your classes is good enough. I hope I’m not trying to be a sourpuss here, but it seems to me that the genuine drive to be excellent, to know excellence when it exists and to be able to distinguish it from just “OK,” to reward that which is excellent around us, and to cultivate—stimulate, nourish, cherish, praise—that which is excellent surely has diminished.

My vision for the next phase of the National Collegiate Honors Council is that we decide it is time to stop bemoaning this slip into the mediocre and decide that there is no one in a better position to fix it than we are, that we take a position in the landscape of national higher education as the cultivators of excellence across departments, programs, populations, segments of our institutions, and institutions themselves.

This is not to suggest that NCHC, or Honors, become the stodgy defender of curricula, pedagogies or demographics of the past. Indeed, real excellence in undergraduate teaching and learning requires a certain daring, a willingness to experiment. Liberal education demands the
CULTIVATING: SOME THOUGHTS ON THE NCHC’S FUTURE

liberation of open minds. While respecting and cherishing classical texts and classroom techniques which time has proven valuable and effective, we need to be the advocates as well of the risky, the new, the untried.

Undergraduate excellence needs a cultivator in American colleges and universities: I think it should be us.

******

The author may be contacted at:
University of Minnesota, Morris
Office of the Chancellor
309 Behmler Hall, UMM
Morris, MN 56267
email: schumans@mrs.umm.edu
Further Thoughts on The Future of NCHC

JOAN DIGBY
LONG ISLAND UNIVERSITY, C. W. POST CAMPUS

I was one of the panelists with Sam Schuman in the final plenary session at the Fall 2000 conference. Since I was the outgoing president of NCHC, and had indeed gone out by the time we spoke to the audience that Sunday morning, I had already spent considerable time thinking about the future of our organization. Nevertheless, Sam’s call to arms as the defenders of undergraduate excellence—clear and resonant—was the most important message of the day.

So let me open my reply in support of Sam’s position paper. While he talks about a “dramatic revision of our organizational mission,” his insight into numerous ways that honors can push the quest for excellence beyond the boundaries of individual students and programs establishes an expansive directive that I hope we wish to follow.

It is time, in other words, to affect the outside world. Many of us already sponsor the kinds of lecture series and extracurricular activities that encourage participation outside our program membership. Yet even Sam’s suggestion of an honors award for excellence in a university service arena still remains more campus-bound than we need be. As long as we limit our quest for excellence to our immediate academic environment, I would have to say that we are not fully extended.

That is why I think it is time for NCHC to voice its standards in the larger world of higher education and the popular media. I believe that Sam is right in saying that “we have drifted towards a culture of mediocrity.” And if he is also correct in thinking that honors faculty and directors hold higher standards than the OK, the C, the “good enough”—then we have the obligation to make as widely known as possible our revolt against popular mediocrity.

How can we do this? By interjecting our voice into popular media. NCHC needs a public voice that is reported in The Chronicle of Higher Education, in important magazines, newspapers and public radio around the country. When important issues in higher education and its funding are
FURTHER THOUGHTS

brought before the people or before Congress, NCHC should be among the first organizations consulted for a professional opinion. Currently our External Relations Committee is working with a Public Relations firm to develop new brochures about NCHC and publicize the work we do. But we do not need to wait for the completion of this project in order to get started. Whenever an article on higher education “begs” for a reply from the perspective of honors—reply! Write to the newspaper in your own voice, as director or faculty member. And when you give your institutional affiliation remember to say that you are a member of the National Collegiate Honors Council. Tell reporters or interviewers about NCHC and direct them to our national office or website. We can be our own best advertisers.

Getting our voice out there is important because I believe we have a lot to say and much of it extremely positive and optimistic. When people refer to the deterioration of standards and the mediocrity of our culture, they do not generally do so in order to applaud it. So if you have a great student who has produced a brilliant piece of research, publicize it as much as possible. Send an article to the local paper. In my experience, a well-written press release generally gets printed (almost without change) under someone’s byline! The External Relations Committee has recently asked you to submit any such articles that you may already have about your students. We wish to use stories about real students, real achievers in our new organization materials.

For a long time NCHC has been good at teaching and learning, at talking and listening—but mostly to each other. In the future we need to be talking with and listening to people from other organizations in higher education. In the year of my presidency, I made a great deal of this. I felt that we were too self-directed, and as a result too few people knew about us. If our mission in support of excellence in undergraduate education is to expand, then we need to talk, think, partner and work with others. I believe we are making great strides in that direction. Every NCHC Honors Semester in the growing list is a beneficial partnership that extends our reputation for unique experiential learning opportunities. Every conference contributor is also an enthusiastic partner who carries home an important message about NCHC, its programs, students and intellectual values. Each year the list of conference contributors grows longer. Generally we meet these partners in the Idea Exchange, where they present a tremendous range of opportunities to our students. By reaching out we gain contacts
that are mutually beneficial. I am pleased to say that our current President, Hew Joiner, is vigorously pursuing new relationships with important organizations that will modify and enrich the work of NCHC. And just prior to our Chicago conference, Sam Schuman and Anne Ponder will host a summit, bringing together more than a dozen leaders of organizations committed to excellence in undergraduate education with whom we may explore future avenues of engagement.

Some of the most recent explorations may also extend our influence abroad. While we have always had some members from the international community, “honors” appears to be on the rise in countries such as Holland, Australia and Canada. The fact that overseas institutions are contacting NCHC for direction in structuring honors components is a very positive development. Earl Brown has recently represented our organization in Utrecht, and we have every reason to believe that other invitations will follow.

If I am speaking practically about NCHC rather than theoretically about the future of honors, it is because I believe that our eclectic philosophy and methods have been clearly defined over the years and that the future of honors is generally secure. If we look at the number of honors programs evolving into colleges, we get some sense of how universities are using “honors” to market the excellence of their institutions. Thus, as honors gains in funds, status and centrality, its future becomes more secure. Now it remains for NCHC to become fully accepted as THE national organization of honors education—the central repository of information, the voice, the source.

Thus, if our organizational mission is to be dramatically changed or at least sharpened, I believe that change hinges on commitment to our public role. Since we have essentially defined and created American honors education, it is up to us to promote a broader use of our creative models. The future of NCHC must be as an assertive voice in the media and the marketplace of higher education.

******

The author may be contacted at
Long Island University, C.W. Post Campus
201 Humanities Hall
720 Northern Boulevard
Brokville, NY 11548
email: digby@liu.edu.
Sam Schuman’s essay, “Cultivating: Some Thoughts on NCHC’s Future” challenges NCHC and honors practitioners to expand the role of honors on campus so that honors may become the locus of a more generalized push for excellence in higher education. There is a symmetry in Sam’s call since many people’s first involvement with honors, as students, faculty, or administrators, was likely catalyzed by the general disinterest in excellence that pervades much of what passes for education on our campuses. The symmetry arises from going full circle, from the larger university to the safe haven of honors education to practice our craft, and then back to reinvigorate the surrounding academic community. Of course there is also irony in Sam’s vision since I am sure that some people in and out of honors view the role of honors practitioners as pariahs on campus participating in a marginal enterprise out of the mainstream of the “real” enterprise of the university, with “real” being defined as producing grants, graduates, winning sports teams, revenue, knowledge, depending on an individual’s bias.

Sam listed a variety of ways that honors could inject doses of excellence into the experience of students on campus not participating in honors. I am going to focus on one aspect, the classroom, using experience I am in the process of gaining, to explore possible ways that honors can broaden its influence and reach a larger audience on campus than just those students enrolled in honors.

This is my first academic year as a “returning” faculty member not directly responsible for honors on my campus. I was graciously given the fall semester to retool for my return to teaching this spring. My home department, Physics, had their teaching schedule worked out before they had any idea that I would be returning home. Hence I was given much leeway with respect to my teaching assignment for the spring 2001 semester. After much consideration, I decided to offer an experimental course on Einstein’s Spacetime. Years ago, I had envisioned offering such a class...
A Small Step

as sort of a pre-major course designed to expose students planning to major in physics or related areas to some of the more fun aspects of the discipline before they entered the typical mind-numbing calculus-based introductory physics course. But like many ideas, I never got around to implementing this one.

One of the dead horses I have beaten during my long involvement in honors is the lack of challenging and serious science courses for students in liberal arts, business, education, etc. Although we have such a course in the Honors College at UNLV (see my essay in the previous issue of JNCHC), I began to envision a different course, one open to a broader range of students. I spent time in the fall designing a course that would introduce students to Special Relativity while requiring no other prerequisite for admission than some level of facility in algebra. As a topic, Special Relativity can be approached seriously and rigorously using logic, algebra, and a willingness to grapple with the surprising conclusions that arise. Therefore I confidently, probably overconfidently in retrospect, decided to offer a course built around the wonderful world of shrinking meter sticks and slow clocks to any student willing to declare herself or himself proficient at an unspecified level in algebra.

It is fair to ask what role honors played in my decision to design and offer such a course. First, offering a course is easier than enticing enough students to take it to meet the reasonable enrollment criteria that exist on campus. Therefore I recognized that I was putting a lot of time and effort into developing a course that might not attract enough students to overcome the enrollment barrier. Although this was a real risk, I thought I had two reasons for optimism. First, I thought that I could probably sell the course to the administration even if the course did not attract the nominal fifteen students required. (I thought I could get by with five or more students.) Second, I decided to use my connections with the Honors College to recruit students using their database. Although the course would not be offered as part of the honors curriculum, my plan was to teach it at a level of seriousness not typically found in a science course for non-majors. The pictured audience would be students in honors and students not in honors who would be attracted by the posters describing the course that were placed around campus.

An algebra-based exploration of Einstein’s theory of Special Relativity. The topics covered will include but not be limited

78

Journal of the National Collegiate Honors Council
to time dilation, length contraction, the addition of velocities, the Lorentz transformation, the Twin Paradox, and Minkowski space-time diagrams. The beauty and consistency of Special Relativity will be emphasized. The only prerequisite is curiosity about the natural world and minimal skills in algebra. This course satisfies three credits of the Core Requirements in Science.

The development of Special Relativity by Albert Einstein in 1905 was the beginning of the revolution that has inexorably led to the current, and still evolving, view of the physical universe. Although Special Relativity completely reformulated the relationship of space to time, the intuitively bizarre conclusions of Special Relativity follow easily from two assumptions, a healthy dose of logical thinking, and a modicum of algebra. The consequences of Special Relativity have been affirmed experimentally over and over again.

One of the fundamental lessons that an understanding of Special Relativity forces upon the open-minded student is that human “intuition” has little effect on the rules that underlie physical reality.

As the starting date for spring semester registration drew close, I speculated along with my colleagues in physics about the chances of getting five or more students to enroll, which I thought sufficient to keep the course on the books. Since students in honors have priority registration, I was confident that the first few days of registration would determine whether or not I had an audience.

One of the things I love about life on campus is the unpredictability of things. An astounding array of students began to enroll for the course. It was scheduled for a room that held about 20 students in the Physics Building. The enrollment quickly necessitated a change to a larger room in the Engineering Building. The enrollment eventually peaked at about 40, fluctuated, and finally settled at something like 36. The students ranged from freshmen in fine arts to graduate students in political science and included a physics major or two. About six of the students were from the Honors College but the vast majority were students who wanted to learn about Special Relativity. My mind set quickly changed from wondering if
A SMALL STEP

the course would go, to wondering how I was going to present the material to a group of students with a bewildering array of backgrounds. I will leave a description of the actual class experience for a future article.

The idea of a hybrid course, one that sees as its audience a mix of students in honors and students not in honors, does not exist on our campus as a defined entity. Honors courses can be taken only by students in the Honors College. Of course students in honors take regular courses, but their density in regular courses rarely, if ever, is high enough to impact the class. In fact, I don’t think the small number of students in my class who were from the Honors College changed the class dynamic. The principle roles the Honors College played was in giving me confidence that an audience could be found and that a nucleus of students in the class would be up to meeting the challenge of the material being presented.

Although I have done nothing to make the idea of hybrid courses more formal on our campus, it does seem to me an idea that could be generalized to broaden the impact of honors education on campus. The generalized idea would be to use faculty who have successfully taught in honors to develop hybrid courses that would be offered outside of honors. The rationale for using faculty with honors experience is two-fold. First, they have a realistic notion of the level of work that can be expected from students in honors and can use that notion to design a course with equivalent expectations. Also, if someone has successfully taught a course in honors, the idea of using the honors database to attract an audience is more likely to succeed.

Of course many faculty would argue that their regular courses are normally taught at an “honors level.” Consequently, what is the need for hybrid courses? The Honors College or Program would operate as “broker” for these courses in the sense that it would offer faculty the opportunity to develop such courses. Interested faculty would negotiate with their chairs for permission to teach a hybrid course. The Honors College would agree to advertise the course within the campus honors community and encourage students to take these hybrid courses. It might even make sense for the University or College’s course schedule to list hybrid courses in a special section to highlight classes that were designed to bring the “honors experience” to a broader group of students.

The visibility of such a program could be increased by having the Honors College offer only one or two hybrid courses a semester. Honors
LEN ZANE

could even reward the faculty teaching such courses with a special stipend or some other recognition to reinforce the notion that honors is a good campus citizen concerned with enriching the educational experience of all students on campus. The idea of hybrid courses is presented here in malleable form that allows the resourcefulness of the honors community to mold it to fit the unique and varied circumstances that exist on campuses across the country. It is offered as one small step honors can take on campus in an effort to move incrementally toward the much grander vision for NCHC enunciated by Sam Schuman.

******

The author may be contacted at

Physics Department
University of Nevada, Las Vegas
Box 454002, UNLV
Las Vegas, NV 89154-4002

email: lenz@ccmail.unlv.edu
Cultivating Honors Excellence in the Other Garden

JEFFREY A. PORTNOY
GEORGIA PERIMETER COLLEGE

Sam Schuman’s observations in “Cultivating: Some Thoughts on NCHC’s Future” about the weakening of excellence in the academy and our culture are shrewd and accurate. The proliferation of award shows on the television screen and in magazines, for example, with their increasingly specialized and arcane constituencies, underscores his point. This bounty leaves a tacky, deadening glaze across the eyes that is tousled only slightly when an award show crops up that offers, if not the ring of merit, at least the jingle of familiarity. If something more than marketing, the dearth of good programming, or self-promotion is operating here, then I suspect the culprit is, as Schuman asserts, “that the assumption of excellence has been weakened, if not lost.” Everything is wonderful, miraculous, the gift of the gods, and befitting of highest honors. I suspect that we want our palates to be more discriminating than that, than Dante’s Cerberus, a creature satisfied by eating mudpies, and that we encourage the students in our Honors Programs to practice the analytical skills to make discriminations more tenable than that of Cerberus.

If Schuman’s proposal that the National Collegiate Honors Council and individual Honors Programs take on the task of awarding excellence across the “landscape of national higher education” is to fly, it must first surmount the perception that this endeavor is not part and parcel of the celebratory morass described above. Perhaps more problematic than this task is avoiding the lack of authenticity that taints too many awards in the academy. For all the marvelous colleagues whose commitment to students and inspiring classroom efforts are acknowledged by teaching awards and bring a warm smile to our faces, we unfortunately remember the faculty member bragging in his promotion portfolio about the teaching award he garnered while forgetting to mention how he dismissed his classes early to march them in lockstep to the student polling booth. Or perhaps we
Cultivating Honors Excellence

remember the Chair of the Awards Committee who not only extends the application deadline but also rewrites the materials themselves so that her golden child, the candidate from her department, will prevail. The scenarios are the same; all of us have seen them in one distressing incarnation or another.

That the awards process is subject to human weakness or that the most deserving do not always win should not necessarily derail the effort to cultivate and acknowledge excellence. I worry, however, that institutionalizing yet more awards through Honor Programs is risky business because the burden to keep them genuine and authentic requires more work and resources than it warrants. If Schuman is “an aging child of the 60’s” subject to the occasional “equalitarian fantasy,” I lay claim to being an aging product/victim of the sixties ever suspicious of institutions (even when I am one) and of the mechanisms for institutionalizing processes (even when I write them). I would prefer to promote a culture of excellence within the academy by having NCHC and the Honors Programs comprising it challenge the educational meta-structures and our home institutions with the characteristics underpinning most Honors Programs: the best teachers, small classes, and a nurturing and innovative environment.

Unfortunately, small classes and good faculty are expensive; they require resources. While an institution may be willing to spring for an Honors Program with X number of students, providing such an experience for all students remains unfathomable to too many administrators, especially those who purport that colleges and universities should follow business models. Certainly no one would encourage fiscal irresponsibility on the part of a college, but operating a college like a business is to misapprehend both the nature of educational institutions and the raison d’être of businesses. Students are not customers; thanks to government subsidies, taxpayers, alumni, and endowments, they do not pay for their educations as they do a television or cellular telephone. The product, if it is one beyond an embossed certificate, is, at its best, intangible, amorphous, mysterious.

Paying for faculty and providing small classes appear staid and old-fashioned and certainly not marketable. Such practices are unfathomable, especially to the growing number of administrators who have never taught students or were not adept enough to make it in the competitive business world and have sought refuge in ours. Buying computers or implementing the technology du jour is sexier than paying for more and better faculty members to teach small groups of students, not just superior students.
JEFFREY A. PORTNOY

The task is to convince them and perhaps remind ourselves that access is not the same as education. Pre-packaged courses and electronic delivery that mitigate against a rich and personal interplay are not good enough for the students in our Honors Programs, and they should not be good enough for other students. Here is the fertile ground for cultivating the potential excellence in all students, an excellence they can transport to the landscape beyond the doors of the academy.

The enterprise then for the National Collegiate Honors Council is to challenge the educational values and financial priorities of the very institutions that support its membership and its existence. That venture is risky, and perhaps riskier yet if the success of this project were to erase the differences between non-Honors and Honors, them and us. If successful, this revolutionary enterprise would certainly cultivate student excellence throughout the academy’s garden.

*****

The author may be contacted at
Honors Program
Lawrenceville Campus
Georgia Perimeter College
5155 Sugarloaf Parkway
Lawrenceville, GA 30043-5704
email: jportnoy@gpc.peachnet.edu
It’s Ten O’Clock.
Do You Know Where Your Students Are?

STEPHEN WAINSCOTT
Clemson University

Sam Schuman’s essay urging us to promote excellence broadly and not just within our programs comes on the eve of Clemson’s SACS reaccreditation site visit next year. His observations remind me that I need to get busy. Thanks a lot, Sam.

Like scores of others involved in the reaccreditation process, I will do my part by contributing to, but not chairing, the Honors Program’s self-study. It will feature lots of golly-gee-whiz graphs and charts. I may toss in a colorful pie chart showing honors students from all over the country and many foreign countries, including Texas. The self-study will note strengths and weaknesses, successes and failures. There will be numerous recommendations for improvement. Above all, it will be an honest document summarizing how well the program has done over the past ten years. Assessment gurus will marvel at this Mother of All Self-Studies. If nothing else, they will be dazzled by my Power Point skills.

Why, then, am I troubled? Why am I haunted by the notion that something not worth doing at all isn’t worth doing well? And, just what, you may be asking, does any of this have to do with Sam’s essay?

I am troubled because Sam offers a needed and unsettling reminder that there is a lot more to honors than running The Honors Program. I am troubled because I realize I have devoted too much time and energy to providing opportunities and challenges to the small fraction of undergraduates who are program “members.” I am troubled because I have focused too much on making the program “look good.” I am troubled because it has taken me too long to understand that Sam’s “knight’s move” involves nothing less than radically changing the campus culture. If we really believe this is what honors programs are supposed to do, we cannot accept the idea that honors is simply the crest of a rising tide lifting all boats. Our aim should be to reverse the tide.

SPRING/SUMMER 2001

87
In *Beer and Circus*, Murray Sperber contrasts the “collegiate” and “academic” campus cultures. (He also takes potshots at honors programs, but that’s the subject of another essay for Sam to write). Increasingly, Sperber contends, the collegiate culture dominates many institutions, especially “BTU’s” (big-time universities) with their large and expensive athletic programs. This culture is about fraternity, football, and fun. Courses, books, and other elements of learning are in the scene, but only on the periphery. Professors are regarded as insufferable bores whose demands interfere with the students’ more important social needs. In this anti-educational culture, working on a homecoming float is an acceptable excuse for missing a class. On campus kiosks, announcements of a sorority’s lip-sync contest crowd out posters announcing a lecture by a Nobel laureate. The academic culture is about the “life of the mind” and other intellectual platitudes we honors people are always preaching. Within this culture are students who are disciplined, motivated, and eager for the “world of knowledge and ideas to reach them.” They are present on every college campus, though at the BTU’s they are a single-digit minority. Scorned by the collegians for their disinterest in the party scene, academics are often objects of derision. Sadly, they see themselves as outsiders.

What has the Honors Program done to foster and fertilize the academic culture of the entire campus? To expand the ranks of our life-of-the-mind types to double digits? To make students who are here to learn objects of admiration? To put it in “assessment-ese,” we will know we have succeeded in reversing the tide, in growing the academic culture, in getting Sam to stop fretting when we see….what?

I submit that the “what” is not the kind of evidence that typically shows up in self-studies. Indeed, we may be searching for indicators that defy anecdotal documentation, to say nothing of statistical measurement. Yet, what we should be searching for may be far more important to our tide-reversing, culture-changing mission than any battery of “success criteria.” Here’s a suggestion. Instead of besieging our institutional research offices with requests for yet another statistical summary, let’s take a walk around our campuses and do a little squinting with our eyes and with our ears. Let’s take this walk not during our office hours, nor during regular daytime classes, but at 10 PM. I suggest Thursday.

Aside from the usual activities, e.g., studying, getting drunk, watching MTV, what kinds of voluntary, spontaneous, and largely unstructured activities do you see taking place? Can you spot anyone reading a book?
STEPHEN WAINSCOTT

recommended by a professor? Is it possible to hear a group of students chatting about a concert, a dramatic performance, or a lecture they just attended? Are there groups of students and faculty gathered over coffee and dessert to plan a service project? Is anyone listening to NPR? Do you hear arguments about things more important than the price of a keg of beer or the outcome of Saturday’s game? Not everyone has to be doing these things all of the time. But if we want to claim that the academic culture is alive and well, some students need to be doing some of these things some of the time, AND the students doing them should not be made to feel like outcasts.

Within the past year our Honors Program took a step, admittedly a small and not very radical one, in the direction of culture change. Under the auspices of the New York Times readership program, we arranged for 120 copies of the newspaper to be delivered daily. The sign we made for the newsstand outside the office says that the papers are free and available to students – any and all students. Several times I have spotted faculty members helping themselves. That bothers me a bit, but not too much. Occasionally a custodian will snatch a copy. On my way home one day last week, I spotted the building’s security guard, a kind and gentle soul whose limited formal education likely did not include an honors experience. “Whatcha reading there,” I asked? “Oh, all about this Kosovo thing.” Fine with me.

If we are able to survive impending budget cuts, I want to expand this service to other campus reaches. I’m sure the brothers of Zappa Gamma Wow would appreciate being able to bone up on their current events. I also have a vision that one Thursday night around 10:00, in the vicinity of the athletic department I will spot a defensive lineman reading all about Kosovo.

Culture change. Fine with me.

*******

The author may be contacted at
Calhoun Honors College
320 Brackett Hall
Clemson University
Clemson, SC 29634-5106
Email: shwns@clemson.edu

SPRING/SUMMER 2001
IN his plenary comments at NCHC’s Washington conference (2000), Sam Schuman raised topics of compelling interest to us all: the role of honors and of the NCHC in the context of attitudinal matters in higher education generally, as he sees them. These topics are important to all of us. What individual honors programs actually do, these days, and what NCHC does for them and for honors are deeply important issues as we begin a new millennium. My response is a personal attempt to frame the issues Sam has raised, consider the same span of time he cites—the final thirty years of the old millennium—and suggest a challenge that honors might well address better than almost any other segment of the academy.

First, individual honors programs: increasingly, as I hear about them, they sponsor public events of all sorts, including speakers whose presentations are open to the public. They engage in outreach efforts—to the rest of their campus community, to local junior high and high schools, often both to high achievers and to under-achievers. They increasingly have been providing leadership in student affairs campus-wide, and they continue to provide a laboratory both for teaching from the sensibilities to ‘learning styles’ that Sam cites and from expertise they have gained from pedagogical innovation and curricular experimentation.

It is fair to ask why they do these things, why more now than in the early 70’s. My own guess is that there are many reasons, among which these: Few programs were genuinely well funded when Sam attended the Williamsburg conference. Many more now have their own grants, restricted funds, and/or significant support from their administrations. Indeed, honors programs are now solicited to partner with departments and other programs, partially because honors can help market events, but also because honors is a source of financial backing necessary for others to present these events.

Initially, I think, honors programs rose to accept the counsel of NCHC in order to create “visibility” for honors by becoming a presence on campus and in the surrounding community. They sought implicit justification for
Cultivating Too

their existence in reaching for visibility, and in that process they found they were not utterly ineffectual fundraisers once they had a recognizable face. They were also helped significantly by the need of their administrations to engage in aggressive recruitment efforts. By the 80’s, bringing students to campuses around the country became an essential task so demanding that administrative staff sought help from faculty in general and from honors in particular. A kind of quid pro quo emerged: “Help us recruit, and we will help you raise funds.”

One tacit element of this kind of recruitment outreach was also the need to improve town/gown relationships. Another was to provide professional stimulus on campus to colleagues who wanted development opportunities in times of restricted budgets and no new hires. In short, honors became a resource during the market downturn which hit our colleges hard. Burdened with large residual mortgage debt left over from the post-World War II GI Bill boom, faced with shrinking student pools, attempting to cope with pressures for open admission—all issues well documented in The Chronicle of Higher Education in those years—our colleges gradually came to value honors for more than its products.

When the academy discovered pedagogy and began to think about alternate modes of teaching and learning; when it began to think about modes of inquiry rather than the deposition of information into empty vessels (not that everyone in the academy has switched, but lots of talk about the distinctions between these pedagogies took place in the late 80’s and 90’s), then the usefulness of honors as laboratories for innovation began to seem clearer to more people. That is, structures were already in place. Students with abilities were already willing to experiment, some. Faculty who had already tried new strategies were willing to try more.

So the context for honors and for higher education contains, at this point, both promise and peril. The acceptance of mediocrity, for instance, that Sam laments, could well be an opportunity for honors to carve out another pivotal role for itself. There are dangers in that line of discourse, though. NO department that I know of is eager to claim that THE center of excellence on its campus is an existing honors program. Hence the peril, which comes from a need for unusual diplomacy on this excellence thing, and from the need to maintain centrality for honors in areas of outreach and recruitment. Success has, after all, bred what some think of as greed. Colleges see themselves far more as businesses than as laboratories for open-ended experiments.

92

Journal of the National Collegiate Honors Council
BERNICE BRAID

My fear therefore is that honors walks a kind of tightrope just now. Its cry for excellence must be one note in a chorus of notes. None of the great advances of the past thirty years can really be abandoned. Sam’s idea about “bringing speakers to campus” is provocative since the public venue of such occasions provides both an occasion when excellence can be experienced, touted, and appreciated, while also offering the service of excellence-provider to the larger community. Likewise other forms of service could, if documented and presented, increase the taste for quality even as they establish honors as a center of excellence locally.

There is a possible weapon available to honors programs, moreover, that could help them engage in the precarious balancing act I fear all of us are now in. During those same days Sam refers to as his entry into NCHC, the early 70’s, there was still a strong commitment to liberal education in the academy. That commitment has weakened over the years in proportion to the growth of specializations rooted in professional schools and vocational training. For nearly a decade NCHC’s yearly conferences have reflected deep concern that overall exposure to liberal learning might shrink too much to sustain honors. There were encouraging reports in some sessions about grants at large state universities meant to embed liberal learning in professional education, and these reports were seen as genuine progress in what some felt to be an age of philistines. The most prevalent ‘solution’ to the challenge of liberalizing professionals, or professionalizing liberals, was expressed as the ideal marriage of honors programs—general education, liberal learning—and specialization. I went to many such panel presentations, where the argument rang out clearly for breadth in honors conjoined with depth in the major; in which examples of senior theses satisfying disciplinary depth but offered within honors were given as instances of successful partnership between honors and departments.

All the polarities implied by this central set of concerns persist, of course. Often the strength of honors as a broadener of vistas rests firmly on the power of tracking into professional programs, even at the same campus: that is, the possible risks in a broad-based liberal arts and sciences curriculum appear minimized by a guarantee of acceptance into professional programs. Commonly cited population configurations in particular honors programs indicate that large numbers of students come from applied science and business, and all of us in honors are pleased and proud of our inclusiveness when such numbers allow us to be.

All of which is preamble to the point of my response here, namely that
at this moment, in 2001, honors is posed to perform a service for all of higher education, and for all of its honors students, that is hard to come by otherwise. Employers and graduate schools have been saying for fifteen years now that college graduates are not insufficiently trained in a specialization, but that they are on the whole not very articulate, reflective, careful about detail, alert to innuendo, or cognizant of the ramifications of their own culture which make for high quality graduate study or workplace performance. In fact it is because of this weakness in many undergraduates that honors students are sought out by competitive companies and graduate programs. One significant advantage we should note, therefore, is that honors programs can provide the broad learning, strategies for continued learning, and love of problem solving and engaging with unfamiliar territory that are otherwise not necessarily characteristic of the newly minted bachelor of arts or sciences.

The capacity to ask good questions, to set problems and attempt to address them; the hunger to try new fields and see life whole; the adroitness to attack life in all its multi-disciplinarity: these are the greatest gifts an honors program can give its best and brightest students. NCHC, for its part, can once again provide a forum in which needs and appropriate preparation to serve them can be discussed, and information about relations between the academy and the workplace can be explored. Annual conferences, both regional and national, have consistently been arenas for this kind of interchange and support. In addition to sessions on competitive scholarships and professional school access, then, NCHC can provide real-time conversation among those who recognize the indivisibility of our worlds, the one in here and the one out there, in which our students must not just survive, but thrive.

If we can help our member institutions by leading in this direction, we will be helping honors, to be sure. But we will also be helping, big time, higher education as a whole.

******

The author may be contacted at
Long Island University, Brooklyn Campus
1 University Plaza
Brooklyn, NY 11201

email: braid@liu.edu
ABOUT THE CONTRIBUTORS
ABOUT THE CONTRIBUTORS

Bernice Braid is Dean of Academic and Instructional Resources at Long Island University’s Brooklyn Campus. She served as President of NCHC in 1979, has designed City as Text© explorations for annual conferences since 1984, and chairs the Honors Semesters Committee. The recent monograph Place as Text, edited with Ada Long, reflects many of the pedagogies referred to in this piece.

Joan Digby is Director of the Honors Program and Merit Fellowships at the C.W. Post Campus of Long Island University. Active in honors education for more than twenty years, she served as NCHC President in 1999 and also authored Peterson’s Honors Programs, the official guide to NCHC member programs (1997, 1999).

Betty Krasne is a Professor in the Department of Literature at Mercy College. For fifteen years she guided the Mercy College Honors Program, following which she developed the McNair Scholars Program through a federal grant. In addition to a variety of articles, she is the author of three novels for young readers.

George Mariz is Professor and Chair of the History Department and Honors Director at Western Washington University. His teaching and research interests center on the intellectual history of eighteenth- and nineteenth-century Europe. He is currently working on a study of Thomas Arnold of Rugby, school reformer, translator, and historian.

Dail Mullins, Jr. is a former research biochemist, now Associate Director of the Honors Program and Associate Professor in the Department of Curriculum and Instruction, School of Education, at the University of Alabama at Birmingham. His recipe for red beans and rice was published in the 20th Anniversary Edition of Southern Living Annual Recipes Cookbook.

Jeffrey A. Portnoy is the Honors Program Coordinator for the Lawrenceville Campus of Georgia Perimeter College in Atlanta and an Associate Professor of English. He recently completed his term as President of the Georgia Collegiate Honors Council. He is a member of the JNCHC Editorial Board and Co-Chair of the Publications Board of the National Collegiate Honors Council.
ABOUT THE CONTRIBUTORS

Julie Fisher Robertson is an Associate Professor at Northern Illinois University School of Nursing. She has a master’s degree in community health nursing and a doctorate in educational psychology. In addition to community health courses, she teaches courses in research, leadership and health care policy.

Samuel Schuman is Chancellor of the University of Minnesota, Morris. He led the Honors Programs at Cornell College in Mt. Vernon, Iowa and the University of Maine (Orono). Sam is the author of Beginning in Honors — a Handbook and Honors in Smaller Colleges, both published by the NCHC, and four scholarly books on non-Shakespearean Renaissance Drama and on the Russian-American author Vladimir Nabokov. He directed the NCHC “Beginning in Honors” workshops for over a dozen years, and has served as President of NCHC.

Donna Rane-Szostak is a consultant in critical thinking education and teaches at North Park College of Nursing, Chicago, IL. She has a doctorate in educational psychology and is a geriatric nurse practitioner.

Steve Wainscott is Director of the Calhoun Honors College and Professor of Political Science at Clemson University. He is a member of the JNCHC editorial board and of the NCHC’s executive committee, and is a championship barbecue cooker.

Len Zane is a professor in the Physics Department at UNLV. He started UNLV’s Honors Program in 1985, helped the program become a college in 1997, became Dean of the Honors College in 1998, and stepped down to return to the classroom in the summer of 2000. He is also a past president of NCHC.

SPRING/SUMMER 2001
ORDERING NCHC PUBLICATIONS

To order additional copies or back issues of JNCHC, contact:

Earl B. Brown, Jr.
Executive Secretary/Treasurer
NCHC
Radford University
Box 7017
Radford, VA 24142-7017

E-mail: nchc@runet.edu
Telephone: (540) 831-5004
Facsimile (540) 831-5004

I would like to order the following monograph(s) from the NCHC (see descriptions on the back of this page):

- A Handbook for Honors Administrators
- Beginning in Honors: A Handbook
- Evaluating Honors Programs: An Outcomes Approach
- Honors Programs: Development, Review and Revitalization
- Honors Programs at Smaller Colleges
- NCHC Handbook
- Place as Text: Approaches to Active Learning
- Teaching and Learning in Honors

I wish to apply for membership in the NCHC (check one):

- Student ($35)  
- Faculty from member institution ($50)
- Institutional ($250)  
- Faculty from non-member institution ($125)
- Affiliate Member ($50)

I enclose $___________ in payment.

Name (print or type) ____________________________

Title ___________________ Institution ____________________________

Mailing Address ____________________________

City ___________________ State _____ Zip ________

Telephone _______________ Fax _______________ Email ___________________

Questions? Call (540) 831-6100 or fax (540) 831-5004. You can also email: nchc@runet.edu.
NATIONAL COLLEGIATE HONORS COUNCIL MONOGRAPHS

Institutional members receive one copy of the NCHC Handbook (with annual updates) and one copy of all other NCHC publications, free. Additional copies of NCHC publications may be obtained by writing to the address listed below. Make check or money order payable to National Collegiate Honors Council and send to: NCHC, Radford University, Box 7017, Radford, VA 24142-7017.


**Honors Programs at Smaller Colleges** by Samuel Schuman (Second Edition, 1999, 53pp.). How to implement an honors program, with particular emphasis on colleges with fewer than 3000 students. Members $2.50. Non-members $5.00.

**NCHC Handbook.** Included are lists of all NCHC members, NCHC Constitution and Bylaws, committees and committee charges, and other useful information. Members $10.00. Non-members $20.00.

**Place as Text: Approaches to Active Learning** edited by Bernice Braid and Ada Long (2000, 102pp.). The theory and practice of numerous models of active learning developed within the NCHC, including City as Text©, Honors Semesters, and Faculty Development Institutes. Members $2.50. Non-members $5.00.

**Teaching and Learning in Honors** edited by Cheryl Fuiks and Larry Clark (2000, 128pp.). Discussion of central pedagogical issues in an honors context. Members $2.50. Non-members $5.00.