UNIONS AND MANAGEMENT:
WORKING OUR WAY OUT OF
FISCAL STRESS

Proceedings
Twenty-First Annual Conference
April 1993

FRANK R. ANNUNZIATO, Director
CAESAR J. NAPLES, Editor
BETH H. JOHNSON, Conference Organizer

National Center for the Study of Collective
Bargaining in Higher Education and the Professions
Baruch College, City University of New York
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Baruch College, City University of New York
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Bargaining in Higher Education and the Professions
Baruch College, City University of New York

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INTRODUCTION

So far, the decade of the 1990s has tested the mettle of higher education administrators and faculty union leaders to find solutions to the lingering fiscal crisis which has dominated the academy for the last three years. The theme of the 1993 conference presented by the National Center for the Study of Collective Bargaining in Higher Education and the Professions, "Unions and Management: Working Our Way Out of Fiscal Stress," emphasizes the efforts made by unions and management to cope with perhaps the worst conjuncture of negative economic, political, and social forces to beset higher education in generations. Some of these efforts were made unilaterally on the part of either university administrators or academic unionists. In other cases, labor and management searched cooperatively for answers to decreasing budgets and declining public support. On still other occasions, faculty union leaders and academic administrators on some campuses found themselves locked in mortal conflict.

Perhaps we too optimistically named this year's conference, as one of our conference speakers, Richard F. Rothbard, Vice Chancellor for Budget, Finance, and Computing, City University of New York admonishes us. Dr. Rothbard suggests that we should have entitled this year's conference, "Working Our Way Through Fiscal Stress," since he believes that the hundreds of millions of dollars denied to higher education during the early years of the 1990s will not be quickly or readily restored. In any event, fiscal stress, the overriding theme of the 1990s at the academy, particularly at public institutions where faculty collective bargaining predominates, has stimulated creative thinking on the nation's campuses, because, despite the claims of certain modern management theoreticians, the alchemy which produces equivalent academic services with fewer financial resources continues to elude us.

THE BI-COASTAL RECESSION

In these Proceedings, we first look at how the two megastates of faculty collective bargaining, California and New York, have responded to the fiscal crisis. Joseph M. Bress from the New York State Office of Employee Relations discusses how a commitment to work force development helped to resolve difficult economic issues at the bargaining table. CUNY Vice Chancellor Richard F. Rothbard recounts the managerial steps which that institution had to take first during the fiscal crisis of the 1970s as well as today to provide high-quality educational services to greater numbers of students with shrinking budgets. Three academic union leaders, Irwin H. Polishook, president of the CUNY Professional Staff Congress (PSC), Linda Ray Pratt, president of the American Association of University Professors (AAUP), and VirginiaAnn Shadwick, president of the NEA's National Council for Higher Education, contribute to this discussion from the faculty point of view. Professor Polishook, while claiming that America's colleges
and universities have been "overwhelmed by adversity," nonetheless demonstrates how strong faculty unions can insure the preservation of academic standards at financially scrapped institutions. Professor Pratt reconstructs the rancorous 1992 struggle between faculty and administrators at San Diego State University (California), which she characterizes as "a fable for our fiscal times." President Shadwick analyzes the consequences of the severe recession in California upon its massive public higher education system and urges a greater faculty role in the determination of its future.

We then turn to scenarios in facing hard times at specific four- and two-year institutions. President Alice Chandler of the College of New Paltz, State University of New York (SUNY), President Tilden J. LeMelle of the University of the District of Columbia, and Clara Lovett, provost of George Mason University (Virginia) relive their experiences with fiscal austerity at their four-year institutions. Presenting the community college perspective in facing hard fiscal times, are President Sean A. Fanelli from Nassau Community College (New York), Dr. Philip Y. Nicholson, president of the Nassau (New York) Community College Federation of Teachers, and President Salvatore G. Rotella from Riverside (California) Community College.

**FACULTY PRODUCTIVITY**

Hard economic times have rekindled the age old debate on faculty productivity. We present three points of view. Professor Henry Lee Allen of the Graduate School of Education and Human Development, University of Rochester (New York), has scrutinized much of the available empirical evidence. He states, "The assertion that faculty have been derelict in their professional duties is bogus or specious, with few exceptions." Gordon K. Davies, Director of Virginia's State Council of Higher Education, argues against legislatively mandated faculty teaching loads. Dr. Davies argues for a new definition of productivity, based upon "learning as a function of cost." He also urges us to define "work" differently. Finally Professor James S. Fairweather of the Pennsylvania State University Center for the Study of Higher Education, shares the results of his national empirical studies on faculty compensation. He concludes that..."the diversity of academic missions is not reflected in faculty rewards. Academic institutions and the programs within them have adopted a faculty reward structure dependent on greater involvement in research and publishing, and less involvement in teaching."

**PROFESSORS AND POLITICS**

Of course, no conference dedicated to the effects of fiscal stress upon colleges and universities could be complete without some inclusions from the realm of politics. Dr. Lawrence Gold, director of the American Federation of Teachers Higher Education Department, argues that faculty unions must
become much more politically involved in budgetary fights at the state and national levels. Dr. Lawrence K. Pettit, president of Indiana University of Pennsylvania, focuses on four aspects of what he labels, "...the reality of our political circumstances." He urges all constituent groups on the nation's campuses to cooperate more closely with each other "to enhance the political effectiveness of each institution and of higher education generally."

DISCRIMINATION

While academic administrators and faculty unions have spent perhaps most of their time over the past three years worrying about the fiscal crisis, another issue has also attracted much attention on college and university campuses: discrimination. Our conference presented panels and speakers on sexual harassment, the Americans with Disabilities Act (ADA), and pay equity. Dr. Rachel Hendrickson of the NEA's Office of Higher Education, Constituent Group Relations, surveys a number of faculty collective bargaining agreements on the issue of sexual harassment. Dr. Hendrickson also develops eight criteria a faculty union should consider before entering collective bargaining discussions over the topic of sexual harassment. Attorney Richard L. Hartz of the law firm Anderson, Kill, & Olick (New York City), John Rose, special advisor for the disabled with the New York City Human Resources Administration, and John Sorrenti of JRS Architects (Mineola, New York) describe the legal details of the new Americans with Disabilities Act (ADA) and its impact upon public and private sector employers. Dr. Lois Haignere, Director of the United University Professions (UUP) Research Department reports on the results of a five year equity fund negotiated between the administration of the State University of New York (SUNY) and the UUP to eliminate gender and race salary disparities at SUNY's 29 campuses and Central Administrative Office. Professor Alison M. Konrad of Temple University's School of Business and Administration describes the results of her study on race and faculty salaries. She argues, "Findings indicate that economic discrimination in the form of earnings differentials are not a problem faced by faculty who are people of color--these faculty experience earnings bonuses." However, Professor Konrad also warns us that the principal form of discrimination still encountered by people of color at the academy is "exclusion" i.e., in a significant number of academic fields people of color continue to have representation of 5 percent or less.

THE PROGRAM

Set forth below is the program of the Twenty-First Annual Conference listing the topics and speakers. Some editorial liberty was taken with respect to format in order to ensure readability and consistency. If an author was unable to submit a paper, the name appears on the program, but the remarks have been omitted. Opinions expressed are those of the authors, not necessarily their organizations or NCSCBHEP.
MONDAY MORNING, APRIL 19, 1993

WELCOME

Francis J. Connelly, Dean, Business & Public Administration, Baruch College

Elizabeth H. Johnson, Administrative Director, NCSCBHEP, Baruch College

KEYNOTE - FACING HARD TIMES:
SYSTEMWIDE PERSPECTIVES -- RESTRUCTURING, REALLOCATION & RETRENCHMENT

Speakers:  
Linda Ray Pratt, President, AAUP  
Prof. English, Univ. of Neb., Lincoln

Irwin Polishook, President  
Professional Staff Congress, CUNY

Samuel D'Amico, Assoc. Chancellor  
University of Maine

Judith Hain, Executive Assistant  
New Jersey Dept of Higher Education

Moderator:  
Carl P. Carlucci, V.P. Finance & Business, University of Maine

PLENARY SESSION "A"
ISSUES IN LABOR/MANAGEMENT NEGOTIATIONS

Speakers:  
Joseph Bress, Dir., Gov.'s Office  
Employee Relations, New York

Robert McKersie, Professor  
Sloan School of Management, M.I.T.

Moderator:  
Howard Jones, First Vice President  
Professional Staff Congress, CUNY

MONDAY AFTERNOON, APRIL 19, 1993

NON-FACULTY BARGAINING

Speaker:  
Richard Hurd, Prof. & Director  
Labor Studies, Cornell University
LUNCHEON
FISCAL STRESS & OTHER CHALLENGES TO COLLEGES AND UNIVERSITIES TODAY

Speakers: Leon Botstein, President
Bard College

Ernst Benjamin
General Secretary, AAUP

Presiding: Matthew Goldstein, President
Baruch College, CUNY

CONCURRENT SESSION "B"
EQUITY IN THE ACADEMIC WORKPLACE?

Speakers: James Fairweather, Prof., Cntr. for Study of Higher Ed., Penn State Univ.

June O'Neill, Professor Economics, Baruch College

Lois Haignere, Director of Research United Univ. Professions, SUNY

Alison M. Konrad, Asst. Professor Business & Management, Temple Univ.

Moderator: Arnold Cantor, Executive Director
Professional Staff Congress, CUNY

CONCURRENT "C"
SEXUAL HARASSMENT

Speakers: Beverly Ledbetter, General Counsel
Brown University

Rachael Henrickson
Organizational Specialist, NEA

Moderator: Julia To Dutka, Dean
School of Education, Baruch College

TECH SESSION: AMERICANS WITH DISABILITIES ACT

Speakers: Richard L. Hartz, Esq.
Anderson, Kill, & Olick, NYC
John Sorrenti  
JRS Architects, Mineola, NY  

John Rose, Adv., Serv. for Disabled  
NYC Human Resources Administration  

Moderator: Esther Liebert, Dean for Faculty  
and Staff Relations, Baruch College  

TUESDAY MORNING, APRIL 20, 1993  

CONCURRENT "D"  
FACING HARD TIMES: A FOUR-YEAR INSTITUTION PERSPECTIVE  

Speakers: Alice Chandler, President  
Univ. at New Paltz, SUNY  

Tilden LeMelle, President  
Univ. of the District of Columbia  

Clara Lovett, Provost  
George Mason University  

Richard Rothbard, Vice Chancellor  
Budget, Finance & Computing, CUNY  

Discussant: Stephen Finner, Director  
Collective Bargaining, AAUP  

Moderator: Neil Sullivan, Chair  
Public Admin., Baruch College  

CONCURRENT "E"  
FACING HARD TIMES: A COMMUNITY COLLEGE PERSPECTIVE  

Speakers: Sean Fanelli, President  
Nassau Community College  

Philip Nicholson, President  
Nassau C.C. Faculty Teachers  

Della Condon, President  
Riverside C.C. Teacher's Assn.  

Salvatore Rotella, President  
Riverside Community College  

Moderator: Joshua Smith, Chair  
Education, Baruch College  

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CONCURRENT "F"
WHAT AGAIN? PRODUCTIVITY ISSUES IN HIGHER EDUCATION TODAY

Speakers: Gordon K. Davies, Director
          Virginia Council of Higher Education

          John Reilly, President
          United University Professions, SUNY

          Henry Allen, Professor
          Education, University of Rochester

Moderator: Donald Watkins, Professor
          Education, Baruch College

CONCURRENT "G"
POLITICS AND FISCAL STRESS

Speakers: Hon. Edward Sullivan, Chair NYS Assembly Com. on Higher Education

          Lawrence K. Pettit, President
          Indiana University of Penn.

          Lawrence Gold, Director
          Higher Education Dept., AFT

          James White, President, Assn. of Penn. State Coll. & Univ. Faculties

Moderator: John McGarraghy, Professor
          Education, Baruch College

TUESDAY AFTERNOON, APRIL 20, 1993

PLENARY SESSION "H"
CAMPUS BARGAINING AND THE LAW

Speaker: Lawrence A. Poltrock, Esq.
          General Counsel, AFT

Moderator: Norman Swenson, President
          Cook County College Teachers' Union

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LUNCHEON
NEGOTIATING THE FUTURE OF HIGHER EDUCATION

Speaker: Barry Bluestone, Boyden Prof. of Political Economy, U. Mass

Presiding: Joel M. Douglas, Professor Public Admin., Baruch College

A WORD ABOUT THE NATIONAL CENTER

The National Center is an impartial, nonprofit educational institution serving as a clearinghouse and forum for those engaged in collective bargaining (and the related processes of grievance administration and arbitration) in colleges and universities. Operating on the campus of Baruch College, The City University of New York, it addresses its research to scholars and practitioners in the field. Membership consists of institutions and individuals from all regions of the U.S. and Canada. Activities are financed primarily by membership, conference and workshop fees, foundation grants, and income from various services and publications made available to members and the public.

Among the activities are:

- An annual Spring Conference
- Publication, of the Proceedings of the Annual Conference, containing texts of all major papers.
- Issuance of an annual Directory of Faculty Contracts and Bargaining Agents in Institutions of Higher Education.
- An annual Bibliography, Collective Bargaining in Higher Education and the Professions.
- The National Center Newsletter, issued four times a year providing in-depth analysis of trends, current developments, major decisions of courts and regulatory bodies, updates of contract negotiations and selection of bargaining agents, reviews and listings of publications in the field.
- Monographs -- complete coverage of a major problem or area, sometimes of book length
- Elias Lieberman Higher Education Contract Library maintained by the National Center, containing more than 350 college and university collective bargaining agreements, important books and relevant research reports.
ACKNOWLEDGEMENTS

The National Center for the Study of Collective Bargaining in Higher Education and the Professions must first and foremost acknowledge the yeoman-like efforts of the Center's Administrative Director, Beth Hillman Johnson, for developing, coordinating, and administering this 21st Annual Conference. For more than 18 months, Beth served as the only staff member at the National Center and the exclusive responsibility for the construction of the conference program fell into her able hands. Stated another way, there literally could not have been a conference in 1993 without Beth. Thank you. We are most grateful.

Dr. Caesar Naples, Vice Chancellor Emeritus and Trustee Professor of California State University, kindly agreed to edit the papers which were presented at the conference. The excellence of Dr. Naple's work proves once again the wisdom of the old saying, "If you want to get a job done well, give it to a busy man." Beth Hillman Johnson supervised the typing and copy editing of the Proceedings here at Baruch College.

The Center's National and Baruch College Faculty Advisory Board furnished important ideas, themes, and suggestions for speakers in the early planning stages of the conference. Baruch College professors Frederick S. Lane and Joel M. Douglas continued to provide important suggestions, encouragement, and support throughout the many months of conference preparation.

Dr. Matthew Goldstein, President of Baruch College, established the essential institutional support that allows the National Center for the Study of Collective Bargaining in Higher Education and the Professions to engage in all of our research and outreach activities, including the presentation of our annual conference and the publication of these Proceedings.

Dr. Frank R. Annunziato
Director
I. HARD TIMES ON BOTH COASTS: A LOOK AT CALIFORNIA AND NEW YORK

A. Issues in Labor/Management Negotiations
B. Academic Unions and the Academic Future
C. Fiscal Fable for our Times: The Case of San Diego State University
D. Facing Hard Times at The City University of New York
E. Is There a Future for Higher Education in California: The California State University Response to Crises
HARD TIMES ON BOTH COASTS:
A LOOK AT CALIFORNIA AND NEW YORK

A. ISSUES IN LABOR/MANAGEMENT NEGOTIATIONS

Joseph M. Bress, Director
Governor's Office of Employee Relations
New York State

The Governor's Office of Employee Relations is responsible for negotiating and administering New York State's collective bargaining agreements with seven public employee unions representing more than 200,000 employees in fourteen bargaining units throughout the state. One of those bargaining units is comprised of the 20,000 faculty and professional staff working in the State University of New York System. Employees in this unit are represented by the United University Professions (UUP). My office also interacts with the City University of New York on certain issues that affect employees represented by the Professional Staff Congress (PSC).

I want to talk with you about some of the issues we confronted during our most recent round of negotiations and how we dealt with them. The economy certainly cast a pall over our negotiations, as I am sure it did yours. The recession has profoundly affected this state and its people. It has resulted in the elimination of approximately 575,000 jobs or about seven percent of the pre-recession workforce in New York. Unemployment continues at a high rate and is projected to average about 8.4 percent this year.

The effects of the recession became pronounced in late 1989 when the state experienced a dramatic decrease in tax receipts across all major categories -- personal income, sales and corporate. Structural imbalances resulted in significant budget deficits that the governor and the legislature had to close. Caught in the stranglehold of the recession, the state had little choice but to drastically reduce spending and downsize operations. Attrition, transfer, early retirement, layoffs and the elimination of vacant positions resulted in a 10.7 percent decrease in union-represented positions and a 12.9 percent cut in non-represented jobs. Between November 1990 and March 1993, the executive branch, general fund workforce has been reduced by approximately 24,000 positions.
Against the backdrop of a devastating economy, position eliminations, budget cuts and bleak economic forecasts, the state opened negotiations with its public employee unions. With existing agreements due to expire on March 31, 1991, and in UUP's case, June 30th, the timing could not have been worse. Previous three-year contracts provided for salary increases of five, five and five and one-half percent. They also included many benefits and enhancements that had been negotiated in significantly better fiscal times -- when negotiations focused on where to spend the money rather than where to find the money.

This was not the case in 1990. In the more than twenty-year history of collective bargaining in New York State, the challenges we faced at this crossroad were unprecedented.

Let me paint a picture for you:

November 1990 -- Facing a budget gap of $6.5 billion, Governor Cuomo proposed a deficit reduction plan that included across-the-board cuts in every area of state operations and government programs. The response? In general, everyone -- the legislature, the constituency groups, special interests -- agreed on two things:

- Yes, Governor, reductions are necessary. We must balance the budget and ensure fiscal integrity;
- And, no, Governor, don't cut my budget; don't reduce our funding; don't eliminate this program; don't do anything that will affect us. Find the money somewhere else -- raise taxes, we need more money not less, let someone or something else bear the burden.

The reactions -- predictable. The actions -- volatile. The inaction -- inexcusable. And none were without consequences.

As part of the overall deficit reduction plan, the governor proposed a five-day furlough for state employees. The intent was to save $135 million and avert the potential layoff of thousands of personnel. The unions adamantly opposed this plan.

While the employee organizations blasted the state for attempting to change the terms and conditions of employment through legislation, they were lobbying the legislature for their own unilateral bills. Despite the fact that we would have welcomed viable alternatives to the furlough program from any and all of the unions, no workable options were proposed as the unions continued to lobby diligently against the plan.
Subsequently, the legislature drafted and passed its own alternative -- the controversial lag payroll. In lieu of furloughs, the lag implemented by the legislature withheld one day's pay for five consecutive bi-weekly pay periods. This lag only affected executive branch employees under the operational authority of the governor. The legislature decided that it and its employees should not have to make this sacrifice.

And, despite the fact that the governor as well as my office did not choose or prefer the lag, the unions did not voice opposition to the legislature since they knew layoffs or the furlough were the only alternatives. Rather than object, they waited until after the legislation was passed, and alternatives such as additional lay-offs were no longer feasible. Then they sued.

In addition to lawsuits, the lag implementation and threat of layoffs prompted demonstrations throughout the state. Thousands of union-represented employees rallied and marched at the capitol, led by their leadership.

In the midst of all this, I arrived at Office of Employee Relations -- timing is everything. And there we sat at the table.

As the state stood fast to its position that there was no money for salary increases for state employees, we watched as local governments and school districts settled contacts with five, six, seven and eight percent increases. These were the same local governments that were crying poverty and denouncing any proposed reductions in aid from the state.

And there we sat at the table -- sitting, talking, caucusing, waiting. However, it was obvious that the economy was not improving. After negotiating for well over a year almost everyone began to accept the harsh truth: The state's pockets were not very deep this time around. And, from the outset, the state's position was consistent -- there was no new money for a salary increase in the first year of any successor contract. And as time marched on, one year turned into two.

Believe it or not, these negotiations were an example of labor-management cooperation to face the impossible task in front of us which neither had created or desired. The affected unions went through these phases:

1. Active opposition.
2. Ran from it or were immobile.
3. Worked to resolve.

We knew it would take time to reach agreement, particularly because of the hard decisions the unions would have to make: both to accept increases they would consider modest, and to agree to concessions that would partially fund those increases. In fact, we declared impasse in the spring of 1991 with the three largest state public employee unions:
the Civil Service Employees Association (CSEA); the Public Employees Federation (PEF), and Council 82. We eventually reached agreement with five of our six unions, including UUP. We have finally reached agreement with PEF, after a blistering two and one-half year negotiating experience which took us through fact-finding before we settled. Reaching agreement with the other unions, however, was not easy or quick. Like any negotiation, agreement is only possible when the needs of both sides are met. And while the economic climate inhibited and in many ways, prohibited the state's ability to do as much as we would have liked for our workforce, we nevertheless forged agreements that are balanced and fair.

I want to outline for you some of the major economic issues the state and UUP agreed to during negotiations. The broad parameters, including compensation adjustments, are similar to the agreements we have with the other four unions.

**SALARY INCREASES**


- An across-the-board increase of 4 percent effective July 1, 1993 or September 1, 1993 depending on the employee's professional obligation.

- Again, depending on the employee's professional obligation, an across-the-board increase of 4 percent effective July 1, 1994 or September 1, 1994 and 1.25 percent effective January 1, 1995 or March 1, 1995. (This two-part salary increase results in a cash cost to the state of 4.6 percent for the year and increases salary rates by 5.25 percent.

- Repayment over the life of the agreement of the controversial 1991 lag imposed by the legislature. One and one-half days will be repaid in February 1994; one and one-half days in December 1994, and the remaining two days in June 1995. Council 82 also wanted the lag repaid and agreement was reached on a repayment schedule similar to UUP's. CSEA, on the other hand, agreed to institutionalize the lag and receive the equivalent of three days pay during the life of its agreement.

- In addition, UUP, CSEA and Council 82 each agreed to withdraw all litigation and grievances related to the lag implemented by the legislature.
DISCRETIONARY INCREASES

Savings were realized by a reallocation of one year's funding and by delaying payment of the 1993 and 1994 discretionary increases. This restructuring helped the state to be able to offer across-the-board increases of 4 percent and 5 1/4 percent in the third and fourth years of the agreement.

HEALTH INSURANCE

UUP and the state had earlier agreed to implement several changes in the health insurance program, which will continue through the life of the agreement. The savings generated by health insurance modifications implemented in September 1991 and January 1992 were used to fund additional payments to the UUP benefit trust fund in the third and fourth years of the agreement. The fund provides prescription drug, dental and vision benefits to UUP-represented employees.

The savings that were generated from changes to the core health insurance program (these changes were recommended by Alexander and Alexander, a consulting firm, following an in-depth study of the program) went directly to offset additional costs being incurred in the drug, dental, and vision care programs being provided by UUP through its benefit fund.

WORK FORCE DEVELOPMENT

The state and UUP reaffirmed their commitment to workforce development through a cooperative joint labor/management committee structure. This mode of program delivery has been particularly effective in assisting displaced employees to retrain for internal and external employment opportunities in different disciplines and professional areas. The parties share the belief that we should provide retraining assistance so that employees faced with retrenchment can continue to be valued, contributing members of our communities. We have provided substantial retraining support to approximately 100 employees since the program's inception.

As we approach the year 2000, the state and UUP recognize that there will be significant changes in the demographics of our workforce. Consequently, we have been working together to aid the recruitment and retention of a diverse campus workforce, one that includes women, minorities, people with disabilities and Vietnam-era veterans. Under the auspices of our affirmative action joint labor/management committee, we jointly designed a leave program to provide financial support for qualified faculty and professionals to strengthen their credentials for permanent or continuing appointment (tenure). Women and minorities often encounter disproportional demands to serve on university committees and perform community service. In recognition of these demands, our labor/management program provides a leave period so that recipients can devote their energies to scholarship and research prior to tenure review. We believe it is the only program of its kind in the nation. More importantly, it is successful. Over 95% of leave recipients have been granted tenure in the State
University System. It is our belief that the program has helped create a diverse workforce and it has brought the talents and perspectives of all people into the full ranks of the university.

The state and UUP also agreed during negotiations that we would explore the possibility of working together in the area of total quality management. I will be speaking more on the state's Quality Through Participation (QTP) initiative in a few minutes.

During the midst of UUP negotiations, a political struggle involving the employer contribution rate to the pension plan participated in by most faculty and university professional staff intensified. The Optional Retirement Program (ORP) was created in 1964 as the growing City and State University Systems were stepping up efforts to recruit and retain faculty. The Teachers' Insurance and Annuity Association (TIAA) and the College Retirement Equities Fund (CREF) were designated as the sole investment vehicles for the ORP, although additional investment options are expected to be added soon.

Originally the employer contribution rate for the ORP was set forth in education law at 12 percent of the employee's salary subject to Social Security taxes and 15 percent of the remainder of the salary. In 1973, pension reform was enacted that resulted in the formation of Tier II of the retirement system. As part of this reform, the Retirement and Social Security Law was amended so that the maximum employer contribution rate to the ORP could not exceed the rate the city or state would make to the retirement system otherwise available to university faculty and professional staff.

In UUP's case, the retirement system otherwise available is the state Teachers' Retirement System (TRS) while in the PSC's case, it is the New York City Teachers' Retirement System (NYCTRS). Both teachers' retirement systems are defined benefit plans and are fundamentally different from defined contribution plans such as the ORP.

Further pension reform followed in 1976 and 1983 as Tier III and Tier IV were formed. For the first time, an employee contribution rate equal to 3 percent of salary was required. In recognition of this, the employer contribution rate for these tiers was reduced to 9 percent of the employees' salary subject to Social Security taxes and 12 percent in excess of that amount. The linkage between Social Security and the employers' contribution rate to the ORP was eventually capped at the 1977 Social Security wage rate of $16,500.

All was well until 1990, when the employer contribution rate to the state Teachers' Retirement System fell to 6.87 percent; a rate that reflected the system's favorable investment performance over time. The employer rate for TRS was below that of the ORP for the first time since pension reform had been enacted.
It was not long before ambiguity regarding the appropriate employer rate surfaced due to the conflict in statutes. The Education Law specified certain rates for the ORP. The Retirement and Social Security Law, however, capped the employer contribution at the appropriate Teachers' Retirement System rate (city or state, depending on which university system was involved) or, the rate specified in Education Law, whichever was lower. In an attempt to remedy the statutory conflict UUP and the PSC got the legislature to pass a bill which would have maintained the higher employer rate set forth in Education Law and eliminate the linkage to the city and state Teachers' Retirement Systems.

However, the governor vetoed this legislation. Changes in funding methods and billing practices for the state's Public Employee Retirement System had resulted in a significant decrease in employer contributions in recent years. As a result of these changes, the governor thought it only appropriate to review the employer contribution rate to the ORP rather than simply establish an arbitrary contribution rate without the benefit of any study or review.

As part of the governor's 1991-92 deficit reduction plan, legislation was introduced to set the contribution rate to the ORP at 11 percent for Tier II employees and 8 percent for employees in Tiers III and IV. The legislature, however, did not act on this bill. The situation became a crisis in January 1992 when the comptroller declared that he intended to withhold all employer contributions to the ORP since he was unable to determine the proper contribution rate due to the conflicting statuses. He based his decision on an attorney general's advisory opinion which stated that the cap established in the Retirement and Social Security Law superseded the specific contribution rates set forth in Education Law. The advisory opinion also stated that the cap should be set on a long-term basis not on an annual basis.

Soon thereafter legislation was enacted establishing a temporary task force on optional retirement programs. The purpose of the task force was to determine the appropriate employer contribution rate to the ORP and review the linkage between the ORP and the defined benefit plans offered by the city and state Teachers' Retirement Systems. The bill called for the employer rate to the ORP to continue at the then current rate until June 30, 1992. Effective July 1, 1992, the maximum employer contribution rate to the ORP was capped at the rate the state otherwise would pay to the city and state Teachers' Retirement Systems. The governor appointed three of the voting members and designated me as the task force's chair. The Senate majority leader and the Assembly speaker each appointed one voting representative. Non-voting members included representatives from SUNY, CUNY, the New York City Mayor's Office, UUP and the PSC. Following extensive study and deliberation, the task force made the following recommendations:

The employer contribution rate to the ORP is competitive with rates at comparable institutions.
• The linkage between the employer contribution rate to the ORP and the rate the state otherwise would pay to the city and state Teachers' Retirements Systems is inappropriate and should be discontinued.

• Tiers II, III and IV employees participating in the ORP, and who were on the payroll as of June 30, 1992, should continue to receive the employer contribution rates set forth in Education Law.

• Employees hired on or after July 1, 1992 who elect to participate in the ORP should receive an employer contribution rate of 8 percent for each of the first seven years of service and 10 percent for each year of service thereafter.

• The state's fiscal plan for 1992-93 should be preserved by repaying over the next three fiscal years any additional contribution due employees on the payroll as of June 30, 1992, but not paid as a result of the cap which became effective July 1, 1992.

The task force's recommendations were accepted by the legislature and the governor, and have been subsequently enacted into law. Thanks to the hard work and creativity of all those involved, we were able to resolve the ORP situation and provide stability for both the state and the employees participating in this retirement plan.

As if the ORP situation, massive layoffs, the legislature's controversial lag payroll union-led rallies, contract negotiations, and impasse proceedings were not enough to be dealt with simultaneously, my office learned that it would be negotiating with a fourteenth bargaining unit and a new union, our seventh. This new bargaining unit is the result of a determination by the state's Public Employment Relations Board (PERB) that SUNY's graduate and teaching assistants are public employees. The GA's and TA's formed the Graduate Student Employees Union (GSEU) in the early 1980's and affiliated themselves with the Communications Workers of America (CWA). In 1984, they filed a petition with PERB seeking recognition as public employees. Lengthy litigation regarding their employment status ensued. The state argued that the GA's and TA's employment relationship was casual and contingent upon their status as students in good academic standing. This position was upheld by a PERB administrative law judge and by its director of public employment practices and representation, on appeal. However, the three member board ultimately overturned those decisions and determined that the GA's and TA's are public employees under the state's Taylor Law. Consequently, we have begun negotiations with GSEU and CWA for the initial collective bargaining agreement which will cover the 4,000 GA's and TA's in the unit.
Obviously, dealing with the university's TA's and GA's as employees represents a change for many of us on the management side. It seems that we have been hearing a lot about change lately. Another presentation at this conference will speak to negotiating change in labor/management relations and change was certainly one of the major themes of last fall's Presidential election. In his inaugural address, President Clinton said that the "...question of our time is whether we can make change our friend and not our enemy." We have a responsibility to evaluate the way we do things and not merely accept the status quo. We simply cannot afford a "business as usual" approach anymore. We have seen this to be true in the business world as we respond to the increasing pressures of global competition; and government is not immune either. (Witness the public's cry for change and demand for reform at every level of government.)

In New York, we have been working on ways that we can change some of the cumbersome structures and ingrained processes that often plague government agencies so that we may be more responsive to our customers -- the taxpayers. We are examining methods which will enable agencies to improve service delivery levels. Through a partnership that my office has forged with six leading private corporations (American Express, Corning, IBM, Kodak, Metropolitan Life and Xerox), a long-term strategy has been developed to encourage creativity and foster total quality management in state government. Guiding this effort is a vision that the governor has endorsed -- a vision commonly referred to in New York State government as quality through participation -- or "QTP" for short. Our "QTP" program involves employee teams working with management to analyze existing processes and to continuously improve service. The quality standards we strive to meet are defined by our customers. Currently, nine state agencies are participating in pilot projects. We talked about "QTP" with our unions during negotiations, and we are now working with them to further define their organizational role in "QTP."

Some of you might be questioning whether total quality management is applicable in a higher education setting? The answer is yes -- total quality management has already gained a foothold at dozens of colleges and universities from Columbia University and Carnegie Mellon to Oregon State University and Rochester Institute of Technology. Corporations -- primary customers of colleges and universities -- have expressed their interest in hiring students who are better prepared for the world of work. Xerox, IBM and other large companies have said that they want individuals who are customer-oriented and able to work as part of a team. So far, total quality management has been applied mostly in administrative areas and business schools, but we are starting to hear more about its potential application in the classroom. I believe we will hear more about this as colleges and universities seek to control costs and, at the same time, improve quality.

I am sure that there are cynics among us who would label efforts like total quality management as just another passing fad. And, I might have agreed some years ago when times were different. But the current economic recovery has been slow in
developing nationally, and it will still be quite some time before it takes hold at the state level. Unlike previous recoveries, there is little job growth associated with this upturn. These circumstances present a challenge for all of us -- public and private, labor and management, large and small. We must continue to reassess our priorities and direct our resources to the areas of greatest need. We must strive to continually improve the services we provide and we must, as Governor Cuomo said in his annual message to the legislature this year, "Continue to deny ourselves some of our wants so that we may meet all of our needs."

Admittedly, it is difficult. However, it can be done as you can see from our experience in New York.
HARD TIMES ON BOTH COASTS:
A LOOK AT CALIFORNIA AND NEW YORK

B. ACADEMIC UNIONS AND THE ACADEMIC FUTURE

Irwin H. Polishook, President
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That higher education is in the throes of hard times and facing more to come seems to be beyond dispute. Denizens of the academy have cried wolf so often for so long that we may wonder if anyone is listening and, now, if anyone is listening with credulity. The first of a long series of "occasional papers" by Robert Nielson and myself appeared in The Chronicle of Higher Education on March 12, 1979. Its title was "Hard Times." It observed, among other things, that "the prognostications are for these hard times to get much worse before conditions get better" (1). Today, even a cursory look at the cogent statistics and at our campuses will remove any doubt on the matter. In terms of public funding and private endowment, the general economy and dependence of the academy on it, as well as the stubborn endurance of these adverse circumstances, American colleges and universities are being overwhelmed by adversity (2).

Nor are any of these grinding conditions likely to abate in the near future. Help may be on its way from the new administration in Washington, in the long run. We are all hopeful that a more intense engagement with the domestic agenda will yield improvements in the economy that can rebound to the benefit of higher education. Directly also, higher education should eventually profit from the greater value and priority invested in education by the national leadership. But no one, least of all President Clinton, is promising quick fixes for anything.

What we are confronting, then, is more years of the same: reductions in student access to higher education, further threats to such access, pressures to increase tuition and to curtail academic programs, tarnishing of the twin achievements -- opportunity and quality -- that have made the American academy the envy of the world (3).

Unionized higher education systems are not different in these respects from other higher educational institutions. The problems are similar. Their future course, however, is not
easily predictable because unionized systems which are mostly in the public sector, yield political leverage that other institutions lack (4).

It should not be necessary to argue that the big problems on our agenda today are fiscal and not academic. The truth is that academics have never claimed institutional perfection; on the contrary, ours is an inveterately self-critical profession constantly examining and questioning our means and our ends. But only the most chronically masochistic among us would blame these severe ills on our academic selves. Even those elements of censure from the Blooms and Bennetts that do apply, apply fairly to a small minority of American colleges and universities, largely high-priced elite private institutions that are not generally representative of the world of academe (5). The hard times that have befallen higher education have been inflicted from without, from a withdrawal of the funds needed to nurture the academic enterprise.

The solutions will also come from without. But, in unionized systems, they will not come without the input of labor and management, whether together or separately. One of the unanticipated developments in collective bargaining in higher education has been the role assumed by faculty unions in advancing the interests of the institution. They have set aside the narrow adversarial roles assigned to them by the early prophets of faculty unionization and have even achieved a surprising level of convergence with academic management on vital issues, where their interests have coincided (6).

A recent case in point, particularly relevant to this discussion, occurred at the City University of New York during the past year. The state budget adopted by the legislature last spring required, in September 1992, a $40 million reduction in the university's operating funds. A state of fiscal exigency was declared by the CUNY Board of Trustees which, in turn, sanctioned the retrenchment of full-time personnel. It was determined that the only expedient way to cut a bare-bones budget was to reduce the full-time faculty and staff by 650.

To the union, the protection of positions has always been our highest priority. Nothing we can gain in salary increases or other benefits outweighs the primacy of jobs. We also prize the academic vocation. In this instance, as in so many important others, the union concern matched management's. A loss of 650 positions meant the curtailment of hundreds of course offerings, contraction of the university's instructional program, overcrowding of classes, impairment of student support services, denial of access, and a serious blow to academic quality -- especially damaging consequences after years of budget stringencies. What union and management did was join together to formulate a better alternative. It was by no means an ideal alternative; that was not available to us. We devised an early retirement plan, which ameliorated the reality of a reduction in staff and averted the catastrophe of substantial retrenchments: The program contemplated the loss of much smaller numbers of professionals -- 350 instead of 650 -- since those eligible for retirement
were on the upper levels of the salary schedules and the retrenches would be at the bottom. By reducing the numbers, early retirement also promised to minimize academic loss. It would be entirely voluntary. It would compensate those individuals choosing it with up-front payments in place of potential reductions in retirement income that they might otherwise have experienced. Again, early retirement offered a program to avoid the devastation of retrenchments: The dislocation of professional careers, unemployment at a time of scarce opportunity elsewhere, and an inordinate burden on junior faculty, including women and minority members who had only recently broken through old barriers to university employment.

Formulating an early retirement plan was only the beginning of the process. Selling it to the legislature and the governor was the toughest part. In this, the union local and CUNY management were helped -- in fact, led -- by the union's state organization, New York State United Teachers (NYSUT), which wrote the bill, advocated for it, and won its adoption at last. Not the least of NYSUT's finesse came from the strength of 330,000 members and a well-established and well-known political action apparatus; moreover, through the state organization we added to the forces at CUNY the powerful commitment of the United University Professions (UUP) as well as SUNY's administration. Neither the PSC nor CUNY management could have won an early retirement bill alone (7).

Without such concerted joint action over the past decade, the hard times that have descended upon union-ized systems would have been harder. Without such action in years ahead, they will be harder than needed. Each partner in the enterprise must do its part. This requires modification of their perceived roles. Unions will continue to transcend their sometimes too narrow concern for terms and conditions of employment. Managers must more forcefully assert their function as chief academic officers, but not as union adversaries. If we have learned anything from the fiscal battles of the past ten years, it is that no one outside will do our academic planning, at least, not adequately or sensibly.

Faculty unions have generally recognized the distinction between their role as unions and the role of faculty as faculty. Most unions have carefully eschewed academic judgements. In advancing a grievance on behalf of a constituent, we cite the academic judgement of his or her peers; we do not add our own. In negotiating a research award program, we provide the funding and the faculty governance structure; we do not participate in that governance or in any way influence the granting of awards. The same applies to the dispensation of contractual travel monies, the assignment of sabbatical leaves and the selection of Distinguished Professors. On such matters as changes in curriculums, student grading policies and admission standards, faculty unions want to defer to the duly constituted faculty bodies. Not surprisingly, faculty unions have always re-enforced the traditional modalities of academic decision-making where collegial principles are fundamental.
When it comes to larger issues imposed on the academy by fiscal adversity -- and they are here -- faculty unions are already enlarging their perception of "terms and conditions of employment." By larger issues, I mean such academic changes that may become necessary in the character of the academic institution, in the profile and number of its students, in the nature and quality of its academic program, and in the fabric of the faculty's professional lives. For professional employees, such issues are terms and conditions of employment. They know their union must play two special roles in influencing the outcomes of those issues.

The first union function is to assure that the voice of the faculty is heard. There are few colleges or universities in the country that do not give the faculty such a voice. There is a great deal of variation in the degree to which it is heard and heeded. It is generally best when the faculty proposes and the president disposes by incorporating its counsel. On some campuses, however, the faculty is listened to on almost every matter -- except when it disagrees with the president, or on the most critical issues. Whether or not the faculty prerogative is sanctioned in the union contract, an academic union must fight, if necessary, and even with the pressure of political leverage, to guarantee that the faculty participates in deciding the major academic policies governing its institution. It is ironic that collegial principles are too frequently the losing values in contests over what is essentially academic decision-making (8).

In addition, in the hard times that hold academe in their grip, faculty unions must go beyond these struggles. Already throughout the country, states, boards of higher education, multi-campus systems, colleges and universities have opened for examination and re-examination such fundamental questions as faculty accountability, academic assessment, the restructuring of institutions, programs and courses, and the reformulation of admission and tuition policy. Faculty accountability involves such bread-and-butter considerations as course workload, class size, scholarly productivity and the value of research. Academic assessment invites such considerations as value-added results of the educational process, with the immodest assumption that one can precisely measure academic achievement. Restructuring often moves into the area of positions, the shuffling, addition and elimination of faculty lines. Admission and tuition policy has similar repercussions affecting the professional lives of the faculty. It may be difficult to demarcate the point at which the faculty function ends and the union function begins. Wherever they may be, the union will be part of the process with the capacity to advance faculty interests, the crisis leader of the faculty as its advocate.

"Hard times" is not just another transforming metaphor of the past decade. This usage is a description of the bleak reality that has socked academe. Are we likely to enter the next century with the best of the past undamaged? Perhaps the basic question is: How do we survive this century intact? A strong faculty union is one guarantee of a secure academic future.
REFERENCES


2. "Sixty percent of the nation's colleges and universities experienced mid-year budget cuts in 1992, prompting most to raise tuition, ... (F)aculty salaries have barely kept up with inflation, with some institutions implementing salary freezes and involuntary furloughs.... Because of the mass layoffs of part-timers, tenured faculty have been forced to make up for the loss by teaching larger classes, more sections and, in some cases, increased course loads."

"Nothing in the future portends improvement in conditions in the immediate future.... Institutions cannot continue to raise tuition and fees as a substitute for funding shortfalls. The core of tenured faculty members will not continue to be immune from retrenchment actions.... Financial restraints inevitably lead to calls for greater accountability and this, along with diminished support from the general public, have combined to create an image problem as well as a fiscal crisis."

"This crisis has been very destructive: it has triggered salary freezes, and sagging morale among faculty members and students." Iris Molotsky, "Analysis of Higher Education's Future: More Hard Times to Come as Funding Continues to Lag," AAUP College & University Fiscal Update, 1:2, March 1993, pp. 1, 4-5.


According to historian Paul Conklin, "these trends seem all but irreversible:"the increasing reliance of private research universities on federal research grants and of their students on federal loans or scholarships; "the retrenchment in such funds and the increasing resistance of parents to unending tuition increases that for a decade have averaged over double the inflation rate;" the prospects of further cuts in state and federal support of public universities, and a popular revolt against taxes. "Growth in support for higher education will do well to keep up with overall economic growth, and will not keep up with enrollments." "Bleak Outlook for American History Jobs," Perspectives: American Historical Association Newsletter, 31:4, April 1993.


HARD TIMES ON BOTH COASTS:
A LOOK AT CALIFORNIA AND NEW YORK

C. A FISCAL FABLE FOR OUR TIMES:
THE CASE OF SAN DIEGO STATE UNIVERSITY

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In the traditions of mysticism there are two paths by which one may reach a moment of revelation: the \textit{via positiva} and the \textit{via negativa}. Today, I want to take us down the \textit{via negativa}, at the end of which appear some truths that can guide us through the fiscal darkness. Or, perhaps we should call this story a fable for our fiscal times and listen for the moral at the end. The tale is of San Diego State University. The path it traces is how not to proceed when cutting the budget.

On June 9, 1992, 111 tenured faculty and 35 probationary faculty (for a total of 146 on tenure tract) received notice that they would be laid off effective October 7, 1992. This constituted the largest known dismissal of tenure-track faculty in the AAUP's history. Before the June 9 notices, San Diego State University had, in 1991-92, cut a substantial number of part-time faculty, faculty on retirement, and full-time lecturers to meet a budget shortfall which was initially represented as $18.5 million, but in fact came to only $5.7 million.

Although some faculty lost jobs, the infrastructure -- the non-academic budget -- was not cut. Salaries in athletics, university telecommunications and university relations went up in 1991-92. Overall operating expenses grew by $3 million while salary lines for academic staff were reduced by $10 million, an 8.9 percent decrease.

More cuts were expected to come the next year. The Senate head appointed an \textit{ad hoc} Committee on University Restructuring which evolved guiding principles for priority in the event of more cuts. These recommendations defined criteria by which to cut programs. The criteria included the following:
1. Program quality
2. Program centrality
3. Program need
4. Continuing diversity
5. Size of program -- was it large enough to cover the area?
6. Other factors being the same, the ratio of cost to efficiency would be considered.

The criteria rejected more "across-the-board" cuts and came to be known as the "narrow and deep" way. Though the faculty committee had worked to define the principles, unfortunately neither administration nor faculty worked to set up procedures by which they would be carried out. No stated means of consultation were in place, and no plans were developed on either side to implement these criteria.

On May 12, 1992, President Tom Day announced that the campus would take an 8 percent cut. Six days later, on May 18th, without consultation with the faculty, either in the Senate, CFA or the Committee on Academic Resources and Planning, President Day announced to the Senate what he planned to cut.

President Day's plan called for eliminating nine complete departments and slashing five more. Those to be eliminated entirely were Anthropology, German, Russian, Religious Studies, Aerospace Engineering, Health Sciences, Family Studies, Industrial Technology, Recreation and Natural Sciences. Those five to take deep cuts were French, Italian, Sociology, Chemistry, Art, Telecommunications, and Film.

The budget for Academic Affairs absorbed 75 percent of the reduction because President Day had decided to hold constant the then-existing proportion of the budget devoted to each major budget center. But, the "infra-structure within Academic Affairs" was walled off, so the cuts came mainly from teaching staff. There was no consideration of this decision by the Senate or its Executive Committee.

The President said he expected the Senate to engage with him in working out the details of the plan but, at this point, faculty, hearing of plans to fire them and students facing elimination of their programs, openly resisted. The President termed their protest as "theater" and went ahead without Senate participation.

What did follow, however, was a set of negotiations between President Day and his deans. Whatever logic might have existed in the original plan was altered by the ad hoc arrangements that resulted from these negotiations. The Dean of Arts and Sciences reported, for example, that discussions for his college began with 25 positions for elimination and overtime increased to 45.
The criteria adopted by the Senate that were to serve as guidelines for making cuts were not discernable in the final cuts -- indeed, they had, from the start, been so broad and overlapping as to be of questionable utility. To the extent that a pattern was discernable to our investigating committee, they concluded that it was the cost-effectiveness of reducing senior faculty. The President noted in a May 29, 1992 memorandum to the Senate that "the average annualized salary for a tenured faculty member is roughly 25 percent more than that of a probationary faculty member."

It is almost unbelievable that an administrator concerned with quality would layoff senior faculty except as a last resort. One must assume that high salary has some correlation with merit, and in laying off the highest paid faculty, Day was also laying off some of the academic best. The CFA contract required President Day to lay off faculty in departments in inverse order of seniority. In order to protect junior faculty in some departments, he made deeper cuts of senior faculty in other departments. In Sociology and Chemistry, for example, after Day's plan had cut a few promising junior faculty, why not cut deeper into senior faculty in order to avoid cutting other junior faculty elsewhere? That Sociology and Chemistry were central to the curriculum and of high quality with many students -- all approved criteria for being exempt from cuts -- seemingly was lost in the expediencies of capturing the large salaries of senior staff.

After the June 9th termination notices, the battles between faculty and administration at San Diego State University were public, national in interest, and played out in the media.

The California State University System's Chancellor, Barry Munitz, apparently recognizing the severity of the turmoil on the SDSU campus and the attention with which the press was covering every incident, affirmed that the process of faculty consultation was important and that no progress on cutting the budget would occur without faculty participation. On September 14, 1992, Chancellor Munitz released special funds to SDSU that made it possible to rescind the layoff notices first until January and later through June 1993.

Faculty consultation at SDSU has been in process this year. Deep distrust remains, but this spring the SDSU community is talking about a different strategy to handle cuts, one that involves, we hear, no more than two layoffs, and those decisions arrived at in the context of program consideration and faculty consultation.

The story I have been telling is taken from the report of the AAUP's investigative team. It is the story of record, published in the March-April 1993 issue of Academe. But, now I would like to share an anecdote that is not in the official report. In January, I was at SDSU and attended a public meeting sponsored by CFA and the Faculty Senate. Those attending included President Day and Chancellor Munitz, several members of the Board of Trustees, faculty and students. It was the winter break, but hundreds of people...
turned out. The meeting went on for hours with long lines of people at the microphone to speak, to hurl charges and to express pain and outrage. In my 25 years in the profession, I have never seen anything between faculty and administration so raw, so bitter, so openly hostile as that meeting. I have never seen administrators so openly charged by faculty and students with what amounted to malfeasance in their duties. It made me feel sick inside to watch this university being shattered by distrust and betrayal. What I remember most vividly was one professor at the microphone who told about the friends and colleagues all across the country who called and asked, "What the hell is happening at San Diego?" What made him sick, he said, was not just the fear and anxiety about losing your job, it was the shame of being at a place where this kind of thing happened.

San Diego State University has been a very costly lesson in every way, and it is important that we learn from it. What can we conclude? Several things come to my mind.

CONCLUSIONS

1. You cannot make, remake, or downsize a university without involving the faculty. The institution just breaks apart— we must have consultation, and must specify procedures for that consultation.

2. You cannot protect the best junior faculty by terminating the senior faculty. The message to junior faculty is loud and clear: They see that they, too, will have no reason to expect job security or fairness when there is no institutional commitment to those faculty who have invested their careers in building the programs. Those promising junior faculty go elsewhere.

It seems to me that the intent of the layoff language in the contract at SDSU was subverted by President Day's plan. The order of layoff was specified by the contract on the basis of seniority within departments. Instead of honoring the principle of seniority, President Day, once he had cut the junior faculty in a department, moved on to cut more senior ones so that he would be able to protect junior faculty in other departments. Furthermore, the underlying premise in this strategy raises questions of whether it was impermissible on grounds of discrimination on the basis of age.

3. Administrators isolated from the faculty will not get the advice they need to implement successfully policies that harm the interests of faculty and students. An administrator who refuses to meet and confer regularly with a faculty union or senate cannot expect faculty to consent to policies that negatively affect them.

Had SDSU had a history of faculty consultation and a cooperative attitude toward the faculty union of sharing budget data and ideas about how to re-allocate, the budget cuts might have been made with much less pain, and to some educational point, and with nothing resembling the public agony that resulted. Other California State University
4. Institutions need definitions of financial exigency that provide a more explicit understanding of how severe the budget cuts must be before tenured faculty can be touched.

The AAUP's definition of financial exigency requires evidence of damage so severe as to threaten the institution's ability to remain open and meet its basic educational requirements. The contract language of "lack of funds" or "lack of work" at SDSU proved too vague a term by which successfully to arbitrate the appropriateness of the retrenchment plan. To succeed without fracturing the academic community, a diagnosis of retrenchment or exigency must be credible enough to command consensus.

5. The example of SDSU brought to light the programmatic risks of encouraging massive early retirements -- in California this was called the so-called "golden handshake" -- to meet budget cuts. About twice as many faculty took a retirement option as was expected (the administration apparently expected about 60 faculty to avail themselves of this option; 116 did). Encouraging extensive use of retirement to meet a budget cut can have two negative consequences:

(1) It may pressure faculty to retire who are not really ready to do so.

(2) Extensive loss of faculty through retirement options may constitute a random pruning that can decimate programs. Cutting programs through retirement is a haphazard way of retrenchment that is unconnected to issues of academic quality. The principle of seniority of faculty appointment is an appropriate one, and it should not be subverted. At SDSU, some faculty took retirement in the hope of protecting junior faculty in their departments. In some cases, however, the junior faculty were cut anyway, or have left SDSU for more stable positions at other institutions. Departments lost on both ends; they lost the best junior people and the best senior people in a random kind of pain without gain.

6. When faculty and programs are not protected, neither are the students. The administration's stated intent to consider student needs proved utterly hollow. Even the announcement of the elimination of departments was made during the last week of class, immediately before students were to take exams. Instead of meeting budget cuts with a plan that shifted money from non-academic funds to academic ones to reduce the impact of cuts on students, the academic shut-down came abruptly, and in May classes were deleted from the fall schedule.
Many students in programs that were slated for elimination or deep cuts relocated to other institutions over the summer. In his May speech, President Day noted that when programs are discontinued, students would return to find programs gone. He did not note that with their programs gone, many students would not in fact return. The end result of this May to December fiasco at SDSU has been long-range damage to staff and students in programs that did not have to be cut, were not cut as announced, and may never be cut. The destruction of San Diego State's stability is more lamentable because it was utterly unnecessary.

7. President Day set tenure against retaining diversity which had been attained in the hiring of junior faculty, but several of the program cuts were in areas where many women were faculty, such as health sciences and family studies.

Only occasionally was the protection of diversity clearly operative. Another bad side effect was, as one person put it, to "create a climate of distrust and resentment toward ethnic studies and faculty of color." The administration's policy gave a privileged status to women and minorities that on one hand exaggerated antagonisms and on the other was not consistently used to preserve them. The inconsistencies and contradictions in the implementation of this criteria nullified the positive arguments in its behalf.

8. Although every institution needs and benefits from a broad range of support services, recreational programs, and an infra-structure that makes things work, the central work at any college or university is that done by faculty and students. All other programs are secondary to the academic mission of an institution.

The administration at SDSU walled off from consideration for cuts the non-essential if desirable part of the budget, including the athletic programs. Institutions that cut academic programs, classes, and faculty first go for the jugular vein of their own throats.

Are there any positive guidelines that we can extract from this unfortunate case that may enable the rest of us to cope more successfully with budget cuts? I see three:

1. Set as the number one priority protecting the integrity of your academic programs. If so, you will protect most of the legitimate needs and claims of the faculty and students.

2. Provide an extensive and public set of consultative procedures for faculty consultation.

Some administrators want to short-cut this consulting process because they believe it: (a) generates controversy and (b) slows things down. The example of SDSU and several other campuses tells us that in the long run it takes less time and controversy to go through established procedures, openly, slowly if necessary, than to announce cuts and then try to enforce them from the top down. Even a modern
university must be a community of scholars, but an institution is a community of interests with many different emphases. In common to all interests must be providing education. Without a genuine dialogue -- by which I mean one in which all interests have credibility and share the power -- that common interest may not be found. Something may be saved without that common vision, but it is not likely be the quality of education.

3. And finally, do nothing precipitously or in secret when debating the careers of faculty and the future of academic programs. We must think carefully and collectively about what we really want and about how really to get it.

The deepest irony of SDSU, perhaps the tragic irony for Tom Day, is that he sought to make San Diego State University distinct from other campuses. In a July 20, 1992 memo to the Senate he wrote of his desire to keep SDSU "different" from other CSU campuses, to make it "a unique kind of place." Given what San Diego State represents for many in higher education today, I hope it indeed does prove to be "unique" and that others can learn from this negative example.
HARD TIMES ON BOTH COASTS:  
A LOOK AT CALIFORNIA AND NEW YORK

D. FACING HARD TIMES AT  
THE CITY UNIVERSITY OF NEW YORK

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I wish to share with you some of the strategies implemented at the City University of New York to deal with the new realities or reduced governmental support for higher education. I am afraid I do not share the optimism inherent in this year's conference subtitle, "Working Our Way Out of Fiscal Stress." It implies that such stress is both remediable and temporary. If my reading of the political tea leaves is correct, however, then it is my strong belief that the fiscal stress we face today - or at least the conditions that have inspired that stress - will be with us for the foreseeable future. Had it been up to me, therefore, I might have chosen the subtitle, "Working Our Way Through Fiscal Stress." Since the only way out of our current fiscal stress is to receive restoration of the hundreds of millions of dollars in tax revenues lost in recent years, the real issue before us is what type of institutions do we become in response to that loss - what do we preserve, what do we jettison and how do we re-order internal priorities and, with it, resource distribution.

This particular session is supposed to offer the four-year institution perspective. As an integrated system of two- and four-year colleges, CUNY has employed strategies that have frequently - although not always - cut across the broad institutional spectrum. While individual campus responses to particular crises may vary in accordance with history, culture and circumstance, the particular viewpoint I offer today is pan-institutional, reflecting management decisions adopted to advance the overall policy objectives of the chancellor and the Board of Trustees for CUNY as a whole.

As prelude, I think it is important to sketch briefly the history, especially fiscal, of the City University of New York. My apologies to those who already know this well.
CUNY HISTORY

In 1847, following the results of a public referendum in New York City, the Free Academy, precursor to City College, was established. For the next 114 years, more colleges were added, sometimes initially as extension campuses of existing colleges like City and Hunter. Enrollment expanded and a system of semi-independent municipal colleges evolved - all financed by the City of New York, and all tuition-free for full-time resident undergraduates. In 1961, the current City University was formed, combining the individual colleges under a common governance structure and with authority to grant the Ph.D. degree. Although the State of New York contributed formulaic aid to the senior and community colleges, the University's operating and capital budgets remained the responsibility of the City. For 129 years, in fact, through war and depression and monumental changes, including the establishment of open admissions, the City found the means - and the will - to support CUNY and keep it tuition-free.

All that changed in the mid-1970's. Faced with imminent fiscal collapse, the City ceded financial control of the senior colleges to the State, along with majority representation on the then Board of Higher Education. Tuition was imposed for the first time during America's Bicentennial celebration. All construction in progress was halted. And CUNY lost 50,000 degree students in the same year in which 20,000 staff were sent to the unemployment lines because of the lack of funds forced the shut-down of the entire system for several weeks.

Throughout this period various commissions and blue ribbon panels considered the future of higher education in New York State. The CUNY Board was re-organized several times and is now called the Board of Trustees. Admissions standards were adjusted. College missions were realigned. Eventually, as the turmoil of the '70's was replaced by the leveraged buyouts, acquisitions and merger hysteria of 1980's Wall Street, conditions started to improve. At CUNY, construction resumed and enrollment rebounded, although markedly different in ethnic composition. But tuition invariably went up and up, and the new stability of the '80's soon ran smack into the national recession and its harsh toll on the Northeast.

The damage was inflicted slowly at first. A couple of million dollars cut here, under-funding of contract costs there. "Horrible!" we thought at the time, not knowing what was waiting just around the corner. Then the '90's hit higher education like a ton of bricks. As the saying goes: "A million here, a million there - pretty soon it adds up to real money." For CUNY, in four short years, it added up to more than $200 million - $200 million in lost State and City tax-levy support. That $1,000 for every student currently enrolled at CUNY!

Yet, the place we find ourselves in today as an enterprise is a result of more than just a shrinking tax base and rising expectations. If the will could be found to direct new millions to prisons, AIDS and the public schools, despite admittedly difficult fiscal circumstances, why could the will
not be found to at least protect higher education from evisceration?

I will leave that question hanging since I am supposed to be describing how we cope and not why it happened. I am sure the second question could be the subject of an entire conference all by itself.

THE CUNY RESPONSE

During CUNY's first flirtation with disaster in the '70's, the rule of thumb in implementing budget cuts was: "Things before people, non-teaching before teaching." What appeared to be a compassionate policy at the time turned out, in hindsight, to have serious defects. One of the legacies of its adoption was the serious deterioration of most physical plants with an eventual repair cost substantially higher in later years. Other casualties of the policy were student advisement and other support services, library acquisitions, equipment replacement, security, and other "non-classroom" activities - each of which wreaked its own special havoc on the institution and from which the university was finally beginning to recover until the recession hit.

Subsequent actions taken in response to continuing budgetary pressures reflected a more balanced approach in the wake of earlier experiences. Campuses ultimately came to the realization that most activities contribute, in their own way, to the success of the enterprise and that an appropriate balance among all activities is needed.

DOING MORE WITH LESS

The University began to be bombarded by terms and phrases not previously part of its lexicon. Phrases like "doing more with less" and "cost containment," and terms like "productivity." These seemed more appropriate for the factory floor than for the academy. What is more, everyone had a different definition for these terms and the conditions under which the university was actually credited with achieving any one of them. For example, the City of New York refused to acknowledge that teaching the same number of community college students in fewer sections by increasing class size was a productivity improvement. It is only productivity, they said, if you also have fewer sections.

So we not only had to worry about taking actions that would have the least harmful institutional impact; we also had to concern ourselves with external validation of those actions in accordance with someone else's rules.

The programs we employed were varied - some by design and some by serendipity. Others just happened to us. There were the obvious ones - three early retirement programs in less than a decade, increasing class size and eliminating sections, vacancy controls and, ultimately and unfortunately, layoffs. There were the technical ones - lagging staff pay periods, reducing leave accumulations, reducing full-time staff in favor of hourly employees, and shelving new programs. Then there were the inescapable tuition increases. Once that genie
was out of the bottle, it was inevitable that lawmakers would seek solutions in periodic increases.

These and other actions were the unfortunate consequences of our fiscal plight. There were also fortunate consequences of that same fiscal plight. Some emerged from a recognition—long overdue—that the University possessed an untapped power to deal with the vendor community if it could only unify on various issues such as purchasing, computing and telecommunications. Serious attention began to be given to streamlining administrative operations so that costs could be avoided or even reduced to the benefit of educational activities. And, technology was looked to as a source of enhancement, both inside and outside the classroom. Everything from automated library services to energy conservation programs were initiated. I would like to address both types of consequences this morning.

OPPORTUNITIES AND ADVERSITY

Even as the budget cuts were taking hold and the impact of program and staff cuts of a magnitude never before experienced were being felt, enrollment was growing dramatically. Today, we have the highest enrollment since the heyday immediately preceding the imposition of tuition and the original City fiscal crisis. In fact, the recently adopted CUNY Master Plan projects a return to that previous record level by the year 2001. The challenge is to do so in a way that preserves quality programs and support structures while preparing for the likelihood of continuing fiscal stress.

I could not, in good conscience, stand here today and argue that quality at CUNY has not suffered already, and perhaps significantly, as a result of budget cuts. What I will argue is that many of the programs we have implemented have averted even more Draconian consequences.

Before citing several of the programs within my purview that I believe have had, and will continue to have, a positive influence on the University, let me say a couple of words about some of the others I just listed.

First, early retirement. Although it has been done three times at CUNY recently, the last one this year, the rationales have not been the same. The first program, implemented in 1986, was intended to reduce overall costs in both the instructional and non-instructional ranks, by providing for one-for-one replacement of retirees with more junior level staff. In a period when the University's ability to allocate resources to areas in critical need was severely restricted, this program also afforded us an opportunity to shore up colleges that were then beginning to experience rapid enrollment growth, and adjust levels at colleges experiencing declines. In fact, the program accomplished many of its intended objectives.

Several years later, when cuts to the University were in the tens of millions of dollars, a second program was
initiated, effective 1990, that was expressly designed to reduce costs. And although, like its predecessor, it guaranteed one-for-one replacement, further cuts the following years by the State made that an empty promise. It did, however, save substantial amounts of money. Finally, in 1992, once again in response to massive cuts, the third version of the program, applicable to instructional staff only, was adopted. It, too, was designed principally with savings in mind.

The loss of senior staff and the institutional memories that went along with them was certainly a blow to the University at the time. And it is a fact that dependence on adjunct teaching and hourly support staff ballooned as CUNY struggled to keep up with the demand for classes and services. But it is equally true that were it not for the ability to offer these programs - especially the latter two - we would have had to resort to much more wrenching personnel actions to achieve the required budgetary savings. It was a measure of how serious conditions became that despite these and other programs, several colleges needed to engage in layoffs this year. What is remarkable, from my perspective, is that relative to the cumulative magnitude of the cuts, colleges were able to avoid massive layoffs throughout this period.

Following the first early retirement program, the State of New York, responding to recommendations of a blue ribbon panel on the future of SUNY, enacted something called "flexibility legislation." For years, SUNY had complained that insignificant budget modifications were mired by the requirement to first obtain State Division of the Budget approval. This severely hampered it's ability to manage it's affairs, especially in an era of stagnant or declining resources. Flexibility legislation gave SUNY, and CUNY, more freedom in allocating appropriated funds internally. While this freed us from unnecessary bureaucratic burdens, it created a convenient escape route for State officials when called upon for more funding for the systems. "Now that you have flexibility," the response would go, "move money from a lower priority area." That state of mind continues to this day. Flexibility also relieved State officials of the political embarrassment of targeting cuts to programs or institutions. With flexibility they could simply mandate a total savings level and leave it to the universities to distribute the pain and suffering.

Finally, before I get to the subject of some of our positive initiatives, I would like to say something about tuition. On too many occasion in recent years, the Board of Trustees has had to confront the difficult choice of raising tuition or watching the University's downward spiral accelerate even further.

The adopted state budget for 1992-93 cut tax levy support of the senior colleges by more than $90 million. To have taken this full "hit" would have meant cutting programs by more than 10 per cent on the heels of prior year cuts and (remember), growing enrollment. The University instead developed a revised tuition schedule that was calculated to raise about $50 million (in accordance with adopted budget
expectations) and was left with $40 million in actual program cuts. Not only were students being asked to pay more and receive less, but separately from the CUNY budget, funding of the State's Tuition Assistance Program was also being reduced.

Because CUNY's continuing students had withstood several previous tuition increases in rapid succession, the University developed a program to cushion the impact on those students and offer an incentive to new students not benefiting from the cushioning aspect of the program. Instead of raising tuition by the expected $500 a year for everyone, the Chancellor developed a program under which continuing students would only pay $350 more. New students would pay $600 more; however, their final semester before graduation would be tuition-free. This had the virtue of satisfying the adopted budget's revenue requirement, softening the blow on the current student population and providing an incentive to improve new student progress toward a degree with a total cost of education less than the $500 increase would have caused.

I am happy to say that the recently adopted budget for next year will not require consideration of a further increase in tuition. In fact, it establishes a mechanism for safeguarding the funding stream for the cost of the last semester free program.

Now, on to positive developments. Perhaps one of the earliest was a new approach to the preparation of the annual Chancellor's Budget Request to the State and City. For years this document, which purported to represent the University's goals for the coming period, was little more than a collection of unevaluated individual college "wish lists" with a cover slapped on it. Beginning in the mid-1980's, however, a process began to take shape that eventually transformed the annual budget request into a true representation of University-wide priorities, with much more realistic resource requirements, and which was consistent with Master Plan goals and Trustee policies.

We have done other things as well. Many of them are not particularly "sexy." But they have reduced administrative cost or restrained its growth, enabling campuses to shift limited resources toward academic operations.

For example, a concerted effort has been under way for several years to try to behave as a university where it is in our interest to do so. This has particular relevance in the area of purchasing. Too frequently, colleges would pay different prices for similar goods and services - often from the same vendors. Knowing that little or no coordination existed on these matters, company salespeople would set prices based upon whatever the market would bear. And it might bear more at some colleges than at others. Other times, prices were higher simply because the volume did not permit greater economies. At worst, companies would convince colleges that they absolutely had to buy the newest version of some gizmo or another or be left in the dust of their colleagues.
Recognizing the disadvantage at which we placed ourselves, we have moved aggressively to purchase a wide range of commodities as a university. We achieve economies of scale and uniformity of service. And, we keep the vendors honest. Items that range from elevator maintenance to hazardous waste disposal to class schedule printing to vehicle insurance are now routinely handled through mechanisms that solicit input from the campuses and produce University-wide contracts. We save on both direct costs of goods and services, and the administrative costs of 18 college purchasing offices pursuing 18 bidding processes for each of these.

Another program, in partnership with the New York Power Authority, involves a relamping program at each of our facilities. When completed, every lighting fixture will be replaced with high-efficiency instruments. Long-term savings are expected to be in the millions. NYPA pays for the installation costs up front and the University reimburses it over two years from the energy savings.

I am a firm believer in not being in businesses which we are not in business for. In the late '70's and '80's, following the breakup of AT&T, everyone became convinced that the road to economic independence was paved with PBX telephone switches. At many of our campuses, hundreds of thousands of dollars were invested in these devices. On paper it made economic sense with projected returns on investment as short as five years. What campuses failed to comprehend, however, was that they would have to, in effect, become miniature telephone companies. They would have to have staff with skills never before necessary to maintain the switches, instruments, and wiring configurations. And when the budget squeeze came, the choice had to be made of whether to deny resources to these areas or alternatively to the classroom, library or elsewhere.

Now, these switches are reaching technical obsolescence. We are working with telephone service providers to have them provide a broad panoply of telecommunications services not even dreamed of a couple of years ago for voice, data and video. Let the telephone company worry about technological upgrades, disaster recovery, service and staffing. We are in the education business.

We are also learning the value of "partnering" with the business community. We are engaged with various companies on different projects to demonstrate the applicability of technology to our business and instructional challenges. Technology affords some useful tools for solving some of our problems. For instance, interactive distance learning can help us to serve better our homebound students.

We are asking questions about ourselves that we never asked before - possibly because we feared the answers. One major project I recently initiated was development of an on-line executive information system that will give the university and the colleges access to a powerful diagnostic and planning tool. It will eventually incorporate data and analyses about students, staff, finances and facilities.
An integrated library system gives faculty and students electronic access to the holdings of every CUNY library from any CUNY library. The project began with catalog services, adding additional capabilities each year. Ultimately, we hope to provide remote access, full electronic text, and gateway services to other library systems. So far, savings have accrued from coordinated acquisitions among the libraries and sharing of serials and other resources.

Finally, along with many other institutions, CUNY has come to the realization that it must engage in development activities. No longer will we be able to rely on government to provide for all our needs, let alone our wants. And we certainly cannot continue to burden our already hardpressed students. Economically speaking, there has probably been no worse time than now to try to develop alternative funding sources for public higher education. And it is certainly a challenge to explain to folks why a public institution supported by tax dollars (they think) must seek private contributions. Yet we have no choice. The University has therefore embarked upon an effort to develop a University capability separate and apart from individual college efforts.

All of these things that I have characterized as "positive," could have — indeed, should have — been done long before this. Consistent with human and organizational behavior, however, it took the advent of a crisis to bring people and issues to the table. Now that these efforts have begun, there is no turning back the clock. Even if manna were to suddenly rain down upon us from heaven, we would continue to pursue these and related efforts as we seek to achieve a new equilibrium.

The budget for next year, if things hold, gives us a chance to evaluate and strengthen our efforts without, for the moment, having to worry about near-term survival. That does not mean, however, that we could not once again face peril at the next disappointing revenue report or some as yet unforeseen rise of government mandated costs.

As we gather here today, the latest commission, established by the State Education Department, deliberates the future of higher education in New York State. We look forward to a reaffirmation of the critical role higher education plays in our society and the immeasurable contributions it makes to everyone’s well being.
HARD TIMES ON BOTH COASTS:
A LOOK AT CALIFORNIA AND NEW YORK

E. IS THERE A FUTURE FOR HIGHER EDUCATION IN CALIFORNIA
THE CALIFORNIA STATE UNIVERSITY RESPONSE TO CRISSES

Virginia Ann Shadwick, President
National Council of Higher Education
National Education Association

In 1960 the California Master Plan for Higher Education became a national model for higher education in that it guaranteed that any citizen who would benefit from higher education would have access to affordable public post-secondary education. The three public post-secondary systems created virtually unlimited opportunities from free technical, certificate or lower division programs at the community colleges to the California State University and the University of California systems which charged very low fees.

For nearly thirty years the plan generally functioned with commitment to the original promise. However, within the last several years the state's fiscal crises have all but threatened to destroy the promise of the Master Plan. The problems started with the tax revolt of the seventies and the passage of Proposition 13 in 1978. This proposition limited increases in property taxes and shifted increasingly greater funding burdens to the state. The situation was compounded by the decreases in federal funding in the 1980's and increased undocumented worker immigration. The downturn in the national economy in the past several years has pushed the state's budget, and its systems of higher education, into unprecedented crises.

A few statistics should serve to illuminate a portion of the problem. In 1991-1992, the United States lost two million jobs; 38 percent of that total was in California and 27 percent of that total was in the Los Angeles basis. During the same period 654,000 new legal immigrants entered California. The 1990 census revealed 40 percent more children under age five than in 1980 which sets the stage for a massive increase in demand for public education. By 2000, there are expected to be 108,000 more high school graduates with that increase projected to a potential 800,000 during the first part of the 21st century. California's minorities will become the combined majority during the decade of the 1990's.

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In 1991 the California Faculty Association, the exclusive representative for the faculty in the California State University system, and the California Community College Association, with the help of their national affiliate the National Education Association, engaged Global Business Network to develop scenarios on the future structure and funding of higher education in California. A brief summary of the three scenarios developed provides interesting insight to responses to the current crises, particularly when coupled with a 1992 Gallup poll on public attitudes towards higher education.

In all three scenarios, one overriding element emerged: the importance of California's economy. Two other important factors also appeared in all three: the need to achieve quality and access for students of many different cultures and standardization could not be the norm in education of the future.

Scenario One, Software Landing, sought to lower costs and enhance productivity through new information technology making massive information sources available to anyone, anytime. Through distance learning, an "out student" model, education would be highly individualized and non-linear. The teacher becomes a guide to the resources available and serves as a mediator between the student and the resources; indeed, the librarian, or information specialist, could become a key position on campus. The limitations of the system involved the need for massive funding of technology, the assumptions of a computer literate student body with access to technology, the development of a "star faculty" system and limited human interaction.

Scenario Two, Education, Inc., extends the current trend towards private sector influence by shifting revenue to business and developing a business model of operation. Within this broad spectrum several possibilities emerge whereby corporations compete directly with universities in the education and training of their employer, or they outsource their training programs to those institutions meeting their market needs, or they provide funding "credits" to their employees who then become customers within the university. In each of these, a fundamental change occurs in higher education in that the emphasis is on training and research for commercial development, not liberal arts education and research for knowledge itself. Faculty would be judged by the marketability of their skills and career counselors and job placement officers could become the key positions on campus.

Scenario Three, New Educational Order, has a technological emphasis like Scenario One but the focus is interactive technology. It involves a paradigm shift in the fundamental assumptions of higher education emerging from chaos theory, cognitive science and evolutionary history. The university functions from a heightened appreciation for the systematic interconnectedness of things; the community becomes
the textbook and there is a focus on team teaching and team learning. In this scenario, the public sector takes charge of developing, regulating and managing publicly funded systems, including education. For faculty, the pressure will be to defend the relevance of their respective disciplines.

In all three scenarios the faculty must be more technologically adept, more culturally tolerant, and more aware of the social and economic environment, especially the politics of higher education. All reflect systems with potentially fewer faculty who have lower salaries and increased workload. All in varying degrees involve a focus on the job market and business influence. All suggest a future whereby if faculty do not get involved in innovation, others will do it for them.

The work with Global Business Network was followed in 1992 by a Gallup poll funded by the National Education Association to determine the public's willingness to fund higher education. In terms of appreciation for the value of a higher education the results were overwhelmingly in that 68 percent of the respondents felt a college education was very important to success with the non-white response even higher and 79 percent said the lifetime value of a degree was worth the cost. In terms of funding, 74 percent stated it was very important that the state support post-secondary education; 76 percent said means other than tuition should be sought to overcome the fiscal problems; and, 65 percent said get more money from business. When it came to the public needing to support and fund higher education, only 12 percent were willing to increase their taxes where 55 percent said that expenditures should be decreased rather than increase taxes and 62 percent were willing to limit access to maintain quality.

California's response to the final crises and the public's unwillingness to pay, has been typical. Community colleges now have tuition for the first-time and differential fees for those already possessing a B.A. or advanced degree; the tuition at the University of California has increased 85 percent since 1989 and is projected for even greater increases. The state now accepts openly the need for tuition and enrollment caps.

The California State University increased its tuition 40 percent in one year while laying off nearly 3,000 temporary faculty and canceling 4,900 courses. The faculty are facing a third year with no salary increase, class sizes are growing and the teaching load remains higher than the norm for comparable institutions despite a negotiated agreement to move in the direction of comparability. There is now a proposal to move tuition to full funding within the next three years with a graduate differential of 150 percent. The promise that one-third of such funds would be reserved for financial aid is being met with cynicism. The Legislature while not acknowledging that the promise of the Master Plan is now gone, continues to insist on a "plan" for assuring the monies are used for instructional purposes and not faculty salaries or administrative costs.
Other responses include retrenchment which confuses "fiscal exigency" with "program discontinuance." The worst case was a proposed layoff of 158 tenured faculty at San Diego State University which targeted specific departments; in the case of chemistry, the remaining faculty would have been all white males over the age of 60. While this layoff was avoided, throughout the system staff and support services have been heavily cut and library programs decimated. The nature of the crisis and sheer survival has stopped any meaningful planning or approach to "down-sizing," now termed, "right-sizing," in any rational way.

The promise of technology as the answer is being looked to by many as a way of stopping the reductions in enrollment and easily accommodating up to 180,000 more students by 2005. Supported by a revised Master Plan, projects such as PROJECT DELTA, would provide cost-effective strategies "using electronic media as the primary delivery system" (Project Delta, p.3). The emphasis is proposed to be interactive media, especially video requiring iconic and visual literacy and utilizing integrated modes of learning. The system has set aside $1.25 million for planning purposes, but their own documents note it is "unclear what eventual and full-service operational costs will be" (Master Plan, p.4). Such up-front costs set off warning signals as noted in a document on revisions to the Master Plan:

with the reductions of existing programs and courses, additional investments in the short-term may come at the expense of attempts to preserve the highest level of student access. (Master Plan, p.4)

Other responses involve pressures to increase productivity, or at least maintain current levels. The proposed new Master Plan would require the C.S.U. to maintain the four course teaching load, mandate on "emphasis on teaching for tenure," and make faculty responsible for academic advising. Throughout the state there is a presumption classes must be larger.

The Chancellor has proposed the creation of "charter campuses" which would be cut free from all regulations and, therefore, would allow "innovation" from the ground up. Faculty read this as a veiled means of getting around the union, eliminating tenure and academic governance, despite protests to the contrary.

Other responses include early retirement options, which due to timelines set by the State Legislature, required many faculty to walk out on their classes in the Fall of 1992. Proposals for year-round operation of campuses are viewed as unlikely in that they do not reduce workload and payroll costs. Others look to models, like Colorado, were institutions from the three systems would be combined into one location thereby sharing "operational costs." There is open discussion of a three-year B.A. Union/management relationships range from a recognized need to cooperate and work together, to fear that some presidents see the crisis as the best opportunity to get rid of the unions. Others are working to make the public case that higher education is an
investment that pays off in terms of taxes and jobs; for example, the C.S.U. total impact on the state's economy is estimated at $4.5 billion in spending and 91,835 jobs.

The problem remains in the midst of crisis, it is hard to respond in a positive manner. The future in California remains problematic. It is sad to note that when President Clinton held his Economic Summit in December 1992, people came away with hope and optimism despite the many problems facing the United States; while in February 1993, California's Economic Summit offered no hope and no solutions. With respect to higher education in California, a report by the California Post-Secondary Education Commission leaves little room for optimism:

...the State of California's budget is structurally ill-equipped to support either the short or the long-term budgetary needs of post-secondary education....Without some fundamental change in the structure and funding of higher education, the gap between the needs and resources can only widen; the stress on educators can only increase; the students' experience of higher education can only deteriorate. (Ogilvy, p. 56)

There are lessons to be learned from California. First, no matter how much you plan, if the economy drops out over an extended period of time, negative impacts cannot be avoided. Second, there is a point where you get so far behind there's no catching up. By profession, academics tend to focus on the past or, at least, the status quo; they are not generally futurists or risk-takers. In sum, academics, without changing dramatically, are little prepared to deal with crisis such as facing California.

Several questions neatly sum up the current situation for higher education in California. Is there a future for higher education in California? Unquestionably, yes. Is the promise of the Master Plan for access to all going to hold? Not under current conditions and not without massive infusion of additional money. Will higher education be able to meet the needs of a multi-cultural state? Probably not. Will higher education in the future be as we know it? Most likely not. Will faculty have a meaningful role in determining the future? One can only hope so.

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II. FACING HARD TIMES AT FOUR-YEAR INSTITUTIONS

A. Facing Hard Times: The College At New Paltz, State University of New York

B. Facing Hard Times: The University of the District of Columbia

C. Managing in Times of Fiscal Stress: George Mason University 1990-1992
The official title for this paper is "Facing Hard Times: A Four-Year Institution Perspective." The talk should really be called "How to Handle an On-Going Budget Crisis in a Four-Year College in the State of New York in a Large Public System with a Unionized Faculty and Staff on a Medium-Sized Campus in a Small Rural Community with a Past History of Retrenchment." You have all heard about six degrees of separation. These are our six degrees of limitation. Unless you understand their forces much of what we did to handle the budget crunch will not make sense to you.

About the State of New York, I probably need to say very little to this audience. New York has one of the most cumbersome financial bureaucracies in the country; it imposes undue costs on itself through its arcane bidding and contractual procedures; and it continues to escalate those costs each year through an ever-expanding list of unfunded mandates and requirements.

The State University of New York, too, needs little explanation here at the Graduate Center. I bear the administrative battle scars of both SUNY and CUNY. While SUNY probably gives its campuses a little more freedom than CUNY does, large systems by their very nature impose across-the-board policies and procedures that may be less than accommodating to individual campus needs.

Unionization, too, requires little commentary. Depending on one's viewpoint, it is either a shield against layoffs, workload increases, and salary reductions or an obstacle to achieving management flexibility through the excessing of inefficient or redundant staff, and through productivity improvements.

What does require a little more commentary is the nature of The College at New Paltz campus itself, which generated our own self-imposed limitations. As a medium-sized campus of
some 8,000 plus students or so, we did not have much possibility for achieving economies of scale, although one of our budgetary strategies was certainly to reduce the number of small section classes and course variety. We had, prior to my presidency, undergone two major retrenchments in 1976 and 1979, which still left psychic scars on the campus. I spent the early years of my presidency trying to erase the near-paranoid effects of retrenchment on a faculty that believed its colleagues had lost their jobs because their course enrollments were low. Persuading the faculty to concentrate on quality rather than quantity had required, what was seen as an unwritten pledge on my part, that I would protect them against such threats. This sense of security among faculty and staff was all the more important on a rural campus in a small community, where everyone knew each other and where maintaining morale and collegiality was perhaps more important than on a larger commuter campus where ties are somewhat looser and the atmosphere more impersonal. New Paltz was -- is -- a self-contained community and, as we learned in the course of the budget crisis, one in which loyalty and faith in the institution would be critical to our survival.

But, that is jumping ahead. Let me begin to outline our reactions to the four-year budget crisis that affected SUNY from 1988-89 through 1992-93, keeping in mind that the one central decision we made at the start was to avoid layoffs and retrenchment if at all possible. Because faculty is central to the mission of the institution and because of the extraordinary investment that they and society have made in preparing them for their calling, it is understandable that an institution would decide that the professorate should be spared above all others. We certainly concurred in that viewpoint but, extended our protection to the maintenance and clerical staff as well. When a secretary or a janitor loses his or her job in a small community such as ours, there are often no alternative positions. We tried to be as sensitive to the needs of our civil service employees as we were to the needs of our faculty members for whom dismissal, in the current economic climate, might also mean the end of their academic careers.

Our stated budget-reduction policy, adopted by the vice presidents and myself at a cabinet meeting in 1988 was: Things before people: vacancies and budgetary non-renewals before layoffs; management before professional or civil service appointees; and no retrenchment or layoffs if at all possible.

Our task was complicated by the fact that we started the budget downslide already understaffed and underfunded. SUNY studies showed that by the late 1980's, the State University of New York was underfunded by some 10-15 percent relative to comparable systems elsewhere across the nation, and the university would be some 20-25 percent underfunded by such measures at the end of the crisis period in 1992-93.

New Paltz, at the start of that period, looked a little richer than average in its instructional resources. Our student faculty ratio had already risen from 17.31:1 in 1985-86 to 19.4 in 1988-89 but, that was still slightly better than
the university average. We were also said to be slightly above the SUNY norm in maintenance personnel, although we disputed those calculations. We were far below SUNY norms in other-than-personal services, however, and slightly low according to SUNY averages in library, student affairs, and general administration. If SUNY was low in all these measures by national standards, then we, indeed began the budget crisis seriously underfunded in resources across-the-board.

Our difficulties were further compounded by our enrollment patterns. The traditional SUNY campus is comprised mainly of full-time traditional aged undergraduates. We, by virtue of our location and, to some degree, by virtue of our educational philosophy as an institution, were far more heavily part-time and non-traditional, and thus, incurred head-count costs that could not fully be captured by the system's AAFTE-base funding formulae.

Any problems we faced in 1988-89, however, were insignificant compared to those we subsequently faced. Although we did receive some increase in funds for salaries and wages, and supplies and materials for fiscal years 1988-89 through 1992-93, we were also required to absorb $3.7 million in permanent cuts during that same period of time. We started out with a base budget of $31.3 million for fiscal year 1988-89 and ended up, after all the pluses and minuses had been totted up, with a base budget of $30.7 million for the fiscal year 1992-93. If one conservatively figures that inflation was approximately 3 to 4 percent a year during that period, the real dollar budget for 1992-93 was probably no more than about $26-27 million in 1988-89 -- almost a 20 percent drop over four years from an already inadequate base.

Compounding the difficulty, within each year, were the non-recurring cuts or expenditure ceilings imposed on us, which averaged about 1 percent a year. Given the in's and out's and up's and down's, it is a little difficult to say just what percentage cut SUNY and we endured over the period of the budget crisis but, an operating budget loss in real dollars of some -20 to 25 percent does not seem to me exaggerated.

Downsizing is a further key word here, for one of the ultimate results of the budget cuts for SUNY as for CUNY has been to reduce access to public higher education in New York. New Paltz started 1989-90 in the midst of an enrollment surge. Our enrollments climbed from 7,590 headcount students in 1987 to 8,250 in 1989, and then rose again to reach a peak of 8,620 in 1990.

One of our first responses to the budget crisis thus became a downsizing of enrollment. We went from 8,620 in 1990 to 8,475 in 1991 to 8,250 in 1992 and will probably bottom out at 8,100 in 1993. We achieved much of this cut by imposing stricter admissions policies which raised freshman admissions standards so that more than 58 percent of our entering freshman class in 1992 had high school averages of 85 percent or better. But, some of the work of downsizing was also done for us -- largely by part-time students -- who turned away from us either because of increases in tuition or
unavailability of sections at the hours at which they needed them, or (but that is a whole other story) because of our inability to provide adequate parking for them owing to New York State policy on parking lot construction at SUNY.

Ultimately, students bore the brunt of the budget decreases. Although it would appear that our budget was only cut by 10-12 percent in unadjusted dollars or 20-25 percent in constant dollars, the real decrease in state tax dollar support of SUNY (and CUNY too, I am sure) was far greater than that. State purpose funds provided 87 percent of the SUNY budget in 1988-89 but only 57 percent in 1992-93. The gap in state support was filled by student dollars. Undergraduate and graduate in-state tuition, held constant for the seven preceding years, doubled during the period from $1,350 to $2,650 annually for undergraduate in-state students, and $2,150 to $4,000 for in-state graduate students. Comparable increases were imposed on part-time and out-of-state tuition costs. Both SUNY and CUNY made an important but unrecognized transition during the budget crisis -- from state-supported to state-assisted educational systems. Most of us were too busy managing the crisis to notice what had occurred.

What, then did we specifically do to manage the budget crisis? As a private industry we would have prospered due to increased customer activity (i.e., our rapid enrollment growth). But enrollment increases actually compounded our problems. We had more mouths to feed, or educate, and fewer dollars with which to accomplish our task.

Because of the non-retrenchment policy, it was necessary for us to focus on the area which offered the greatest degree of flexibility and had, at the start of the crisis, the richest funding. At the very heart of our mission, to be sure, academic affairs was nonetheless forced to assume the largest fraction of our budget reductions. We had already been cutting back on full-time faculty lines in order to bring our I and DR (Instructional and Departmental Research) expenditures more into line with SUNY budget modeling. From 308 full-time faculty in 1984, we had slid to 296 by Fall 1989. By the end of 1992-93, our full-time faculty was 268. Adjunct utilization filled much of that gap. By Fall 1992, we had approximately 230 part-time faculty members not including retired faculty in special post-retirement teaching assignments and part-time faculty teaching on IFR (Income-Fund-Reimbursable, or self-supporting accounts). (These figures do not include extra-service teaching by regular full-time faculty or the instruction provided by graduate teaching assistants).

Despite the increase of adjunct instructors, who cost roughly one-quarter of what a regular faculty member would cost for an equivalent amount of instructional time, it was still necessary to reduce the number of courses and sections offered. The variety of courses offered in many majors was reduced as was the frequency with which specialized courses in the majors were offered. For some of the more popular disciplines, with strong enrollment pressures, such as business and education, higher grade point averages were imposed for entry into the major, leading to the fear that
philosophy might soon be the only major for which an average student would be eligible.

In deciding which courses were to be cut, our priorities were to protect graduation requirements -- the general education courses and the required major courses. Our choice usually fell on low-enrollment sections and on courses where we simply did not have the instructors for coverage. Many students claimed that their graduations were delayed at New Paltz and elsewhere in SUNY because of the budget crisis. Our own impact statements, which we faithfully produced for Albany each year, made much the same claim for awhile but our later analyses showed that the numbers of such students were very low, if they existed at all. Troubles in fulfilling graduation requirements within the canonical four-year period tended to be experienced only by students not taking the required 15 credits a semester or changing their major at some point.

Nonetheless, the impact was severe. Class size and student-faculty ratios increased and we did, at various times, have waiting lists for entry into the college (one group of transfer students were forced to delay entrance for a semester) and students were backed up for entry into the Elementary and Art Education majors. More serious in the long term, however, was the unspoken philosophical shift that occurred. Electives tended to become frills to be cut. Education became more targeted and focused, perhaps a good thing, but to be balanced against the loss of a more exploratory view of the learning process.

Although the largest number of personnel cuts occurred in the instructional area, virtually no major category remained untouched. We gave up by attrition 1.5 positions in Library, 3 positions in Development and Public Relations, 7 positions in Student Affairs, and 4 positions in Administrative Affairs. All divisions were also affected by the hiring freeze that we imposed, which held all but essential positions vacant for at least thirty days and, in some cases, froze positions for more than a year. We also, as possible, shifted people either temporarily or permanently to non-tax-levy sources, such as the DIFR (Dormitory Income Fund Reimbursable Account) or HIFR (Health Income Fund Reimbursable Income Account). In a shift from previous SUNY policy, these new funding mechanisms required that all dormitory facilities be totally self-supporting from student residence hall fees, and that students sustain much of the cost of the campus health services they received.

Other approaches to saving personnel dollars included attempts to reduce overtime, a few budgetary non-renewals and some reorganization and consolidation of programs, such as the mergers of the Library and the Center for Instructional Resources or Art Education and Art Studio. The biggest savings for the system as a whole, however, came from the New York State salary freeze for all SUNY personnel. Faculty and staff went without increases for two years; presidents for three. While useful, and perhaps inevitable, as a money-saving strategy the denial of all salary increases, like the large numbers of retrenchments throughout the SUNY system and
the attempted diminution of some pension benefits, served to erode the university's national standing. Once among the most desired of faculty destinations, a job at SUNY -- and I suspect at CUNY too -- no longer has quite the luster it once had.

We also made savings on the non-personnel (OTPS) side of the budget. During some periods, we issued a self-imposed travel freeze and, at various times, eliminated our faculty development grants. We imposed winter holiday shutdowns to save energy and encouraged staff to use these periods as leave time while faculty and students were away. We achieved additional energy savings through efficiencies that we were able to achieve through SUNY-funded investments in more up-to-date climate controls. We certainly cut back on all instructional equipment and supplies. While we avoided base cuts to the library acquisitions budget, we nonetheless withheld the inflationary increases we received, using them to help pay the $3.7 million in cuts that we took. We were lucky to have some special equipment dollars for our new engineering program. Some of those monies, too, went to pay off our cuts. We did all this at a time when an ever-increasing number of mandates -- "Student-Right-To-Know and Campus Security Act;" "Drug Free Schools and Community Act;" "Sexual Assault/Harassment;" and "Employee Right-To-Know," (Federal OSHA Hazard Communication Standard) legislation; "Exposure Control Plan for Bloodborne Pathogens" -- were forcing us to transfer significant dollars from our remaining funds into unfunded programs that were probably desirable but certainly costly.

Dramatic and damaging as these cuts were, we would have been forced to even harsher and more hurtful measures had we not managed to increase the revenue side at the same time that we were shrinking the taxlevy side of the budget. Chief among these was our ability to shift some of our excess enrollment on to IFR accounts. Although strictly regulated by SUNY and New York State guidelines, we did (with some bending of these rules) manage during the four years of the budget crisis to fund an average of 340 AAFE a year on IFR accounts. Briefly, what that meant was that instead of shipping the tuition that students paid off to Albany directly, we kept some of our surplus enrollments in an IFR account, which gave us enough money to pay both for the cost of instruction and have a little bit left over.

If one thought of those students as truly marginal enrollments, then we did clear a small profit on the transaction. But, we made that profit only at the price of imposing an unfunded workload on many of the service units of the college such as, the registrar's and bursar's offices, financial aid, counseling, career guidance and the library.

Other revenue sources which we expanded during the budget crisis included several international programs, which provided us with some surplus revenues, and a variety of continuing educational programs for IBM personnel -- a source of funding that has largely dried up in the past year or two, although other continuing education programs remain quite viable. Sponsored research programs were also consciously enhanced.
Our new Gerontological Nursing Master's program, for example, was initiated with a $600,000 federal grant. We also made considerable strides in raising private philanthropic dollars.

Ironically, the greatest difficulty we faced during the budget crisis was not budgetary at all. On December 29, 1991, our campus blew up; not figuratively, but literally. A sudden power surge to the campus, resulting from the collision two miles away of a car and a utility pole, caused six PCB-based transformers on campus to overheat and spread both oil-and smoke-borne PCB contamination. The entire campus was closed for a month, and even when we reopened late in January, we did so with four buildings -- two residence halls and two academic buildings -- closed for many months thereafter.

One of those four buildings was reopened in Fall 1992; two others are now safe for occupancy but still closed for refurbishment. The last building -- our biological sciences facility -- is still being cleaned and will not be ready for refurbishment until sometime in Fall 1993, and very likely not reopened for classroom use until Fall 1994.

I could close these remarks with an analysis of the costs New York State imposed upon itself by its delay in making the needed infrastructure repairs that would have retrofitted or repaired PCB transformers at New Paltz and, of course, at other public facilities all over the state. The more than $25 million price tag for clean up and restoration at New Paltz probably exceeds by a factor of ten the cost of having replaced those transformers in the first place. But delays in infrastructure repairs are a national rather than merely a New York State problem and there is little value now in belaboring the point.

The more important conclusion that has been reinforced for me over and over again from the PCB episode is that New York State continues to strangle itself in the costs and procedural nightmares imposed by its own bureaucracy. I shall never forget my dismay at learning that the emergency bidding process in New York State has a $40,000 cap per bid. Try dealing with that process when you have a multimillion dollar emergency on your hands or with the myriad of other regulations that contravene good sense and modern management.

One of the questions I have continually asked myself during the budget crisis was whether our non-retrenchment policy was wise or not. Looking at the campus at the present time, I know that we are at least 10-15 percent below the level of funding we need to maintain the quality that we want with the programs we have, and that some of our resources are misaligned. With fewer programs and services -- i.e., with previous retrenchment of faculty and staff -- we might not be in such a difficult budgetary position today, although we might also, by reducing programs, have lost some of the enrollments on which our funding formula is based.

But, frankly, if we had retrenched, we might not have been here at all. Keeping the campus going in the face of the PCB crisis, and all the difficulties and dislocations that it caused, required lots of just plain cash -- which came, most
generously, from the SUNY Construction Fund to rescue us. But, the emergency also showed the importance of campus cohesion and commitment during a crisis. Our faculty and staff and our student body gave almost unstinted loyalty during the long crisis period. Students put up with inconvenience and uncertainly, staff members put in endless hours of overtime, faculty members revised their curricula and relocated their classes and office space, improvising under the most adverse conditions, but keeping basic functioning of the campus and its academic integrity intact.

I do not believe we could have achieved this kind of cohesiveness had we simultaneously been undergoing the rifts and wrenching caused by layoffs and retrenchments. Our faculty and staff knew that the administration had committed itself to attempting to save their jobs despite the budget crisis and, consciously or unconsciously, they paid the institution back with the kind of loyalty that has no price.

Indeed, this is where I arrive at the end of our four-year budget ordeal. There is no question that there has been some erosion of quality. We have suffered from the bureaucratic costs of doing business in the State of New York. We have been forced to a greater reliance on part-time faculty and hence, have fewer faculty available for out-of-classroom interactions with our students, less chance of relevant scholarly activity, and certainly less participation in campus governance. The infrastructure repairs and equipment replacement funds continue to be delayed and the physical damage to the campus environment is disheartening. Perhaps Abelard's students did sit on straw. The modern university needs state-of-the-art equipment and a well-maintained physical plant to function properly.

There is no question that colleges and universities will all have to be both more efficient and productive, and more entrepreneurial than they have ever been. Universities will have to look at new strategies for delivering instruction, expanded uses of labor-saving technologies, and at innovative ways to increase the non-state moneys available to them whether from private donors or from profit-making enterprises. These are not intrinsically bad choices. As President Clinton has said on the national scale, we cannot go on doing simply what we have been doing. We must decide where we must reinvest.

What troubles me in all this is what has been lost -- probably irretrievably, or so I think. That is the good side of tenure -- and there is a bad side too -- which gave faculty the security to pursue their teaching and research and reinforced the sense of college teaching as a calling rather than a job. I am bothered by the increasingly industrial model which we are following in academe. With our eyes forever on the financial bottom line will we still remember that the real reason for our enterprise is the pursuit of learning and the human development of our students? The testing we have undergone has been severe. The real test will be how well we can retain in coming years our ability to support our insatiable, indeed our seemingly infinite aspirations with only finite resources.
FACING HARD TIMES AT FOUR-YEAR INSTITUTIONS

B. FACING HARD TIMES
THE UNIVERSITY OF THE DISTRICT OF COLUMBIA

Tilden J. LeMelle, President
University of the District of Columbia

The University of the District of Columbia was established in 1976 by an act of Congress and the Council of the District of Columbia as the first and only urban land grant institution of higher learning in the United States. It was formed through the merger of three predecessor institutions: D.C. Teachers College which was formed in 1956 through the merger of the formerly all black Miner Teachers College and all white Wilson Teachers College; Federal City College which had been established in 1968 as the land grant college; and Washington Technical Institute, an associate degree granting institution founded in 1968.

The University is essentially still in formation. Its academic programs and structure are undergoing comprehensive review with the goal of achieving a unitary and coherent academic program/structure. Its administrative personnel system is undergoing review to transform a civil service-government/administrative-bound system to one that allows for the flexibility and mobility needed in an academic administrative environment.

The University's operations and capital needs are financed by city government "subsidy," tuition and other fees, and non-appropriated revenues generated by the University. The University's annual budget must be approved ultimately by the U.S. Congress when that body approves the budget submitted by the District of Columbia. Although the University's academic year conforms to that generally observed nationally, its fiscal year (and that of the District of Columbia) is tied to the Federal Fiscal Year: October 1-September 30.

There is no aspect of higher education that has been spared by tough economic times and tight budgets. The effect of reduced funding on labor relations in the academy, however, has been particularly difficult. In addition to the obvious shortage of funds to support increases in salaries and benefits, some institutions have not had sufficient funds to support current staffing levels. Under such circumstances
ordinary labor relations are severely strained since employees become fearful of losing their jobs.

In addition to the unpredictability about salaries, fringe benefits and job security, many of the other effects of belt-tightening have a direct impact on working conditions and employee morale. Long awaited improvements in facilities and equipment are postponed. The forced breaking of sincerely-made promises, because of purchasing freezes and cancellations, tends to erode trust and confidence between faculty/staff and administration. The best explanations are often received begrudgingly, at best.


1. FY 1992 Financial Plan: The preliminary financial plan developed by the University was $7.5 million proposed expenditures in excess of all anticipated revenues for FY 1992.

2. All revenues from all sources (appropriations, tuition and fees, auxiliary enterprises, endowment earnings and indirect cost recoveries) were earmarked to finance the basic operating budget.

3. The Board of Trustees was compelled to approve a $2.1 million deficit budget for FY 1992. The $2.1 million deficit was net minus after having applied all operating reserves and 20 percent of cash flow reserves as expendable revenue.

4. A history of decreasing revenue base and inflationary costs had reduced the University’s purchasing power by $13 million between FY 1988 and FY 1992.

5. An additional $2.85 million expenditure had to be absorbed as a result of a settlement agreement from a 1989 Faculty Association/NEA grievance.

6. An additional $1.86 million expenditure was incurred as a result of a settlement agreement from a 1986 Faculty Association/NEA grievance.

7. There existed an internal and external political culture which viewed the University as a governmental civil service agency whose administrative, academic and budgetary issues were expected to be resolved through the use of political and legal avenues for resolution.

SUMMARY

1. In Budgetary Terms - $11.9 million problem (17 percent of the appropriated budget.) 12 percent of the total operating budget.

2. In Financial Terms - $6.5 million problem (9 percent of appropriated budget.) 6 percent of total operating budget.
SOLUTIONS TO THE PROBLEM

I. Non-Collective Bargaining Solutions

A. Revenue Generating Initiatives

1. Increase in parking fees to generate additional $93,000 in University revenues.
2. Adoption of tuition increase plan to raise future tuition revenue by $500,000 per 5 percent of increase to maximum 50 percent increase in 5 years.
3. Increase in student academic support/laboratory fees to generate additional $541,000 University revenue.
4. Set aside of $250,000 of indirect recovery revenue to return to colleges whose facilities earned revenue through grant activity. Result was additional $5,000,000 in faculty grant activity in FY 1992.

B. Reductions in Expenditures

1. Reduction in administrative personnel costs of AY 1992 summer school for a saving of $744,000.
2. Centralization of maintenance contracts for a projected savings of $97,000.
3. Elimination of out-of-city travel and conference fees resulting in savings of $398,000.
4. Establishment of non-personal service (OTPS) freeze committee to review non-essential purchase requests resulted in savings of $568,000.
5. Prepayment of rent on leased properties resulted in savings of $16,000.

II. Collective Bargaining Solutions

A. Reductions in Personnel Expenditures

At the University of the District of Columbia, as at most institutions of higher learning, personnel costs average between 72 percent and 75 percent of operating costs. In times of severe fiscal constraints, significant reductions in expenditures can ultimately be made only through a reduction in personnel costs. When reductions in personnel costs become imperative, the obvious conflicts in collective bargaining
arise: Unionized staff vs. non-unionized staff; unionized faculty vs. unionized staff; all employees vs. the "administration."

The University reduced personnel costs through an early retirement incentive and through an unpaid "furlough" imposed by the District of Columbia Council.

(1) "Early Out" FY 1992
The first step in reducing personnel was to offer the traditional early retirement incentive to educational employees, including unionized faculty and non-unionized staff. For the unionized faculty, consultation was held with the Faculty Association representatives. The options for all eligible employees were simple: (a) take the early-out and receive one-half of annual salary immediately, or (b) take the early out and receive one-third of annual salary each year for three successive years. All participants opted for the three year salary payout. The savings were ear-marked to balance the FY 1992 budget and to finance future lower cost replacement personnel needs.

(2) Pay Freeze and "Furlough" FY 1993
Through the Omnibus Budget Bill for FY 1993 passed by the District of Columbia Council, opposed, but not vetoed by the Mayor and approved by the U.S. Congress, a pay freeze was imposed on within-grade pay increases for all employees of all city agencies, independent agencies included. That action, of course, not only delayed pay increases but eliminated them entirely for a year.

The other drastic measure passed by the District Council, opposed, but not vetoed by the Mayor and approved by the U.S. Congress, was the requirement that all city employees except public safety personnel and employees of the Courts be "furloughed" without pay for 12 days in FY 1993.

When the University was faced with the implementation of the "furlough," an attempt was made to include both labor organizations (the faculty bargaining unit of the National Education Association and the UDC local of the American Federation of State, County and Municipal Employees) in discussions of the manner in which the furloughs would be conducted. A management task force was established which included the University labor relations representative. As plans and alternatives were formulated by the management task force, consultations with union representatives were held before final decisions were made. In the case of the faculty union, the major issue was whether the furlough days would be taken on dates on which classes were scheduled. Although the faculty union opposed the final decision, which held students harmless by closing the University for furlough only on non-class days, all other aspects of the implementation were worked out favorably among all participants in the implementation discussions.

The University administration opposed the furlough and proposed an alternative deferred payment plan to the Mayor and the City Council. The government was non-responsive to the proposal. The principle to hold scheduled teaching days
harmless in implementing the furlough mandate was established to preserve the integrity of the minimum contact hours per assigned course credits per semester and to minimize the disruption of the teaching mission of the University.

While the furlough was, in effect, a reduction in pay and a permanent loss of income, the reduction in pay was spread out over 24 pay periods resulting in one-half day's loss of pay each bi-monthly pay period. The University agreed with both unions to not in anyway challenge the unions' decision to file suit in court. The faculty union, however, opted not to join the other unions in their court suit against the City but, instead filed a grievance against the University charging breach of contract. The grievance has been submitted to arbitration, but the process has been suspended pending the final court ruling on the legality of the furlough.

CONCLUSION

The manner in which the University handled the implementation of the furlough illustrates one of the key elements of dealing with labor relations in tough fiscal times: communication. It is important to be able to talk openly about financial problems and actively seek input from both individual employees and labor groups on possible solutions. Another vital aspect of dealing with employees during tough fiscal times is credibility. The need to have accurate, reliable financial information to share with employees is paramount. Last year, when an arbitration award of back pay to faculty proved to be a budget-breaker, the union agreed to spread the payments over three fiscal years at a reasonable interest rate. This agreement faced the reality that the University could only "pay more money to fewer people," an unpleasant truth that will be faced again soon, as we begin negotiations on a new faculty collective bargaining agreement. Our credibility in these negotiations was greatly enhanced by being able to offer to "open the books" to employee scrutiny.

Communication and creditability are perhaps the two most useful and effective medicines to treat the ills that befall labor relations in the midst of financial hard times. It should come as no surprise that the effectiveness of these palliatives is greatly enhanced when given in heavy doses. Increase the number of times to confer with labor representatives but, more importantly, make sure that direct lines of communication to employees are kept open. Let the information flow and provide a clearly defined mechanism for receiving employee input, both through managers and from organized labor organizations. It may not ease the pain, but it helps to spread it around and let everyone know that all share, not only common problems, but common solutions as well.
FACING HARD TIMES AT FOUR-YEAR INSTITUTIONS

C. MANAGING IN TIMES OF FISCAL STRESS:
GEORGE MASON UNIVERSITY 1990-1992

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American Association for Higher Education

THE BACKGROUND

This case study was written from the point of view of a chief academic officer closely involved in the development of strategies for managing a major financial crisis and also responsible for communicating the strategies to deans and other academic leaders.

George Mason University is one of fifteen senior institutions in the Virginia system of public higher education. The Virginia system is decentralized and very diverse. It includes Virginia's historic elite institutions (The College of William and Mary, the University of Virginia and Mary Washington College), a large land-grant university (Virginia Polytechnic Institute and State University), several comprehensive regional institutions and four-year colleges and a network of community colleges.

Once a branch campus of the University of Virginia, GMU gained independent status in 1972 and doctoral status in 1979. Its growth, from about 4,000 students in 1972 to about 21,000 in 1993 paralleled the extra-ordinary demographic and economic growth of Virginia's northern counties during that period. Briefly stated, in the 1970's and 1980's, the counties in GMU's service region made the transition from semi-rural bedroom communities for Washington, D.C. to major centers of employment and population in their own right.

Although this young university enjoyed strong support from civic and business leaders in Northern Virginia, it faced many uphill political battles to secure adequate funding. Until the 1980's, the seniority of powerful members from rural counties and the prestige of the historic elite institutions had a powerful hold on the Virginia General Assembly. These political conditions did not hamper the growth of enrollments at GMU, but they did leave the university in a state of chronic under-funding by
comparison with the older doctoral institutions. GMU entered the 1990-1992 biennium at a level of staffing well below state guidelines and with severe deficiencies in non-personnel funding and campus facilities. This case study is about the fiscal, political and academic strategies GMU employed to cope with financial stress without losing the impressive momentum gained during the 1980's.

VIRGINIA HIGHER EDUCATION AND FISCAL AUSTERITY

The 1990-1992 biennium will be recorded in the history of the Commonwealth of Virginia as the time when the balance of financial support for public higher education shifted from appropriate tax revenue to tuition and fees. Prior to 1990, senior institutions in the Virginia system received between 30% and 55% of their operating funds from appropriated tax revenues. Currently, the range is somewhere between 15% and 30%. In operating funds alone, during the biennium 1990-1992 the system lost in tax dollar support the equivalent of the budget of its largest university, Virginia Polytechnic Institute and State University -- more than $400,000,000.

With the blessing of the Virginia General Assembly and of their local Boards of Visitors (Trustees), institutions made up between 55% and 80% of their losses through increased tuition and fees. These public policies had a dramatic impact. In 1992, Virginia ranked ninth in the nation in per capita income but only forty-third in direct state appropriations per college student. Further, during the 1990-1992 biennium colleges and universities lost access to state lottery proceeds previously ear-marked for capital projects.

The administration of Governor Douglas L. Wilder began inauspiciously, with the discovery that a decline in state revenues threatened the fiscal health of the Commonwealth of Virginia. The national recession came late to Virginia but signs of economic deterioration were evident in early 1990. The most alarming signs were the collapse of the real estate boom in Northern Virginia and the curtailment of defense expenditures, which affected both Northern Virginia and the Tidewater counties. Estimates of the projected state deficit varied considerably and the Treasury's figures -- an estimated $1.9 billion deficit for the biennium -- were questioned by leaders of the General Assembly and by the media. There was no question, however, that state expenditures were running ahead of revenue collection. There was also no question that the Governor, obligated by law to balance the state budget, faced bipartisan opposition to any increase in taxes. Governor Wilder who was, at the time, considering a presidential race had several reasons for implementing a plan of fiscal austerity, at the core of which was the "right-sizing" of state government.

In early 1990 and then again in 1991, the Governor announced across the board budget reductions. His program, he claimed, was intended not merely to balance the budget during his term of office (the Governor of Virginia serves a single four-year term). It was intended to accomplish permanent reductions in state spending. He proposed to achieve that
goal, applauded by conservatives in both parties, without
alienating the progressive bipartisan coalition that had
elected him and without sacrificing essential state services.
In practice, however, across-the-board reductions of 5-6% and
hiring freezes could not accomplish what the Governor had set
out to do. Deeper cuts were needed to generate the necessary
savings: major parts of the budget (support for K-12
education, the prison system, Medicare payments) could not be
cut because they included mandatory spending. Like his peers
in other states, Governor Wilder turned his attention to the
few areas of discretionary spending in the state budget.
Higher education easily stood out. That was the reason higher
education suffered a cumulative loss of about 20% or less.
Making the best of a bad situation, the Governor agreed to
deep cuts in higher education and withdrew his initial
opposition to tuition and fee increases.

HOW GMU COPED WITH THE FIRST BLOW AND DEVELOPED A LONG-TERM
STRATEGY

University presidents were notified in December 1989 of
a 2% reduction in operating budgets. In effect, this
represented a 4% reduction in the second half of the 1989-1990
FY. At GMU the blow was severe, given the University's
chronic under-funding. It could be absorbed, however, by
implementing a hiring freeze in classified and administrative
ranks, by deferring some purchases of equipment, and by
introducing a 10% surcharge for the spring term 1990. Due to
the low unemployment rate in its service region, the
University traditionally had a high turnover rate in staff
positions and, thus, many vacancies. The hiring freeze
produced most of the required savings. The University
was able to avoid staff layoffs and cut-backs in instructional
faculty. But the strain on already thin support services
could not be sustained for long. Additional, this short-term
strategy, born of desperation, left the University
administration without a reserve to meet emergencies and
without resources to support new initiatives. Clearly, a
different approach would have to be used in the event the base
budget reduction became permanent. Attempts were made through
members of the Northern Virginia political delegation to
persuade the Governor and key members of the General Assembly
that across-the-board cuts in higher education had
disproportionately adverse effects on under-funded GMU. These
attempts did not bear fruit. Governor and Assembly chose the
politically easier course, additional across-the-board cuts.

In the summer 1990 colleges and universities were asked
to prepare budget plans incorporating 1%, 3% and 5% reductions
on the already reduced 1989-1990 FY base budgets. Having
absorbed the first blow primarily through a hiring freeze, the
University management team had a few months during which to
develop a longer-term strategy and present several options to
President George W. Johnson. The President chose a fiscal
strategy based on three decisions:

1. To cap enrollment for AY 1991-92 at Fall
1990 levels or about 5% lower than
targets previously approved by the State
Council for Higher Education.
2. To raise tuition to the maximum authorized by the Virginia General Assembly, or about 15% (for a total biennial increase of 25%).

3. To defer planned improvements in the University's information infrastructure and libraries.

This fiscal strategy was chosen among several options as the one most likely to help the University's long-term political and academic goals. But the strategy entailed considerable risks. By capping enrollment more or less voluntarily and departing from previously approved targets, GMU risked alienating potential students and supporters in its service region. Additionally, it risked losing the leverage used successfully in the 1980's to wrestle budget increases from SCHEV and the General Assembly. Reliance on increased tuition was also risky because approval by the GMU Board of Visitors was not at all certain and because the University administration lacked reliable data on the elasticity of student demand. Lastly, a strategy of deferred investment in information resources and management jeopardized the University's ability to serve the needs of emerging campuses in Arlington and Prince William counties as well as continued viability of its high-technology instructional and research programs.

POLITICAL FOUNDATIONS OF GMU'S FISCAL STRATEGY

In the successive speeches to the General Faculty in the spring and fall 1990, President Johnson compared the impact of the state's fiscal woes on the University to the situation of a driver who suddenly sees the road caving in under him. The apocalyptic metaphor revealed his concern that the fiscal crisis, if prolonged, might destroy the impressive political and academic gains of the 1980's, of which he had been the chief architect, and relegate GMU forever to second-class citizenship in Virginia higher education. The President's pessimism was heightened also by the failure of Northern Virginia's political and business leadership to offer more than hand-wringing and sympathy. By early 1991 the region was in the throes of a recession and many supporters of the University perhaps were preoccupied with their private affairs. Or perhaps they concluded that nothing much could be done to help the University politically.

Unable to hold together the external political coalition that had helped GMU in the 1980's, President Johnson turned to internal constituencies. He held numerous meetings with student leaders to explain the fiscal strategy of stable enrollment and increased tuition. In return for their support, he pledged continue improvements in academic support services and increased availability of class sections. During academic 91-92, GMU alone among senior institutions increased the number of class sections while not increasing enrollment.

This internal political strategy also required faculty support. In several addresses to the faculty, the President emphasized his determination to protect instruction and to
safeguard the faculty salary base on which future budget increases might be calculated. Faculty support of this strategy depended, however, much less on presidential exhortations than on the fact that teaching loads for full-time faculty were not increased. Vacant faculty positions were used to hire part-time faculty who taught the additional classes.

Student support and faculty acquiescence gave the president the leverage he needed to win over the Board of Visitors. In the spring 1991, the Board approved a 15% increase in tuition, added to the 10% surcharge of the previous year. The strategic intent behind the internal political coalition -- a new development in GMU's history -- was to stabilize the institution and position it for a return of more favorable conditions in the Commonwealth. Privately and to a lesser extent publicly, President Johnson restated GMU's ambition to become the premier institution in Virginia. That ambition, he knew, would not be fulfilled if GMU responded to the fiscal crisis by throttling creativity of its faculty and abandoning plans for innovative programs and structural changes in university organization and governance.

ACADEMIC GOALS BEHIND GMU'S FISCAL STRATEGY

The fiscal crisis of 1990-92 occurred at a time of tremendous creativity and innovation in academic programs. When the crisis began, in early 1990, several faculty teams were at work developing interdisciplinary programs in the arts, public policy and computational science. Another team developed a Master's program in International Transactions that was distinctly different from the International Studies or National Security programs traditionally available at Washington area universities. In addition to introducing innovative curricula, these emerging programs held the promise of transforming the organization of the university from a relatively static hierarchy of departments and schools to a flexible network of institutes and centers.

The emerging programs were wholly consistent with GMU's mission; each one had features that made it unique in the Commonwealth. In normal times these programs would easily have won approval by the University's Board of Visitors and the State Council. The fiscal crisis had created a different environment.

The Board of Visitors sought assurances that the new programs, three of which were Doctoral, would not detract from the University's commitment to undergraduate teaching. The staff of State Council announced a new policy of "growth by substitution," making approval of any new degree programs contingent on the elimination of under-enrolled older ones.

The president succeeded in reassuring the Board, which approved the new program proposals unanimously. It proved much more difficulty to satisfy SCHEV's requirement of "growth by substitution." A young university with a history of enrollment pressures simply did not have older, under-enrolled programs it could reasonably phase out in order to finance new ones. But, creative solutions were found.
One creative and perhaps radical measure was the elimination of the administrative structure of the School of Continuing and Adult Learning. The most important academic function of that School -- continuing professional education for nurses, engineers and teachers -- was reassigned to the relevant schools, with instructions to the deans to mainstream continuing education in their programs. Non-credit enrichment courses, conference support and other such functions were reassigned to mid-level administrator reporting to the Executive Vice President for Administration. A second step was to streamline the administrative functions of the Graduate School. By eliminating duplication of functions and record-keeping between the Graduate School office and the schools and colleges, the university administration was able to re-allocate clerical and professional positions. Finally, the provost decided to alter the sequence in which GMU would seek State Council approval for the new programs. A proposed Ph.D. in Cultural Studies, developed as early as 1988-89, was deferred in favor of proposals in Public Policy and Computational Science, for which privately endowed chairs and external research funds were already available. The change in priorities exacerbated old rancor among humanities and social science faculty.

In some respects, this academic strategy paid handsome dividends. Each of the newly approved programs attracted more attention and a larger number of qualified applicants than it could admit. But, the fiscal measures that were taken in order to launch the new programs represented the outer limit of what could be done centrally without making truly hard decisions about re-allocation of resources across academic programs.

By the end of the biennium, GMU's political objectives were clearly on a collision course with its academic objectives. The University's academic reputation depended largely on the success of distinctive interdisciplinary programs organized along non-traditional lines. In a climate of flat or diminishing budgets, those programs could only be supported adequately by a re-allocation of resources controlled by powerful and entrepreneurial deans in the professional schools and by rather traditional departmental faculty in the College of Arts and Sciences. Yet the University's internal political coalition was much too fragile to withstand such re-allocation.

The president chose to temporize, neither abandoning support for the new ventures nor giving signals to the deans and department chairs of his commitment to curtail more traditional activities for the sake of programmatic and organizational innovation. By temporizing, he sought to preserve the internal coalition of student leaders, faculty and Board members and, at the same time, rebuild an external coalition in preparation for the 1994-96 legislative biennium.

The president's assumption seems to be that under pressure from an aroused citizenry the General Assembly of the Commonwealth will reconsider its view of higher education expenditures as discretionary. To mobilize the citizenry, GMU has launched a public relations campaign that makes faculty
speakers available to hundreds of organizations such as PTA's, Rotary and Kiwanis Clubs, local Chambers of Commerce, and trade and professional associations. The intent of the campaign is to tap into latent public support for higher education, repeating the success of the fall 1992 referendum of state bonds to finance campus facilities.

State budget projections for the 1994-96 biennium suggest that Virginia may experience some growth in revenues. But, any growth will be absorbed by continuing commitments to K-12, Medicare, corrections and the faculty salary increases approved by the General Assembly in 1993. Therefore, an increase in higher education appropriations is not likely to occur without an increase in state taxes.

GMU's political strategy hinges on the assumption that a significant change in state fiscal policy can occur if universities are able to muster public support during politically crucial six months between Democratic and Republican primaries and the unveiling of the next gubernatorial budget. Whether GMU's political strategy succeeds, changes in its fiscal and academic strategies will be necessary by 1994. The status quo cannot be sustained beyond the next legislative session.

MANAGING FISCAL STRESS: A CRITIQUE

Unquestionably, GMU found creative ways of coping with the financial crisis of 1990-92. Despite chronic underfunding by comparison with older universities, the institution weathered the crisis without either short-changing students or increasing the workload of its full-time faculty. In some ways, the crisis enhanced GMU's reputation for academic and organizational innovation. The institutional strategy put in place in 1990-92, however, has several inherent weaknesses.

The most obvious weakness is that the strategy cannot be replicated in the event of another crisis of similar intensity and duration. The impressive coordination of political, academic and fiscal objectives that assured GMU's survival in 1990-92 involved members of the president's cabinet and was implemented top down. Through the provost, deans, directors of major institutes, and the chair of the Faculty Senate, were informed of presidential decisions. On a number of occasions the president communicated directly with the general faculty, student leaders and the staff. But, the approach chosen to manage the crisis did not provide for much consultation and did not create a framework for handling future crises.

Secondly, the institutional strategy has left the new initiatives dangerously dependent on the university's ability to resume the pre-1990 pattern of rapid growth in enrollments and resources. At the same time, the strategy has generated high anxiety among deans and faculty in the established older programs. Because they believe that the new initiatives were funded at their expense during the 1990-92 biennium (though in fact only token re-allocations occurred), they fear permanent losses in their operating budgets if the base budget of the university fails to grow.

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With no mechanism in place to continued dialogue and consultation and with academic priorities left unclear, GMU is in a perilous holding pattern. Its recent history provides examples of effective and bold management under stress. It provides as well an example of missed opportunities to use a crisis as a vehicle for educating all members of the university community and promoting a sense of shared responsibility for the future. The missed opportunities have left the university without either the financial means or the internal coherence and sense of shared purpose necessary to face adversity in the future.
III. FACING HARD TIMES AT COMMUNITY COLLEGES

A. Facing Hard Times at Nassau Community College: An Administrative Perspective
B. Facing Hard Times at Nassau Community College: A Union Perspective
C. Facing Hard Times at Riverside Community College
FACING HARD TIMES AT COMMUNITY COLLEGES

A. FACING HARD TIMES AT NASSAU COMMUNITY COLLEGE:
AN ADMINISTRATIVE PERSPECTIVE

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In the March 24th issue of Business Officer (a NACUBO Publication), in an article entitled, "Two-Year Colleges Tighten Belts," the results of the 15th annual Comparative Financial Statistics (CFS) study were announced. Not surprisingly, the study showed that half of the community colleges across the nation experienced funding cuts. The response of community colleges to these cuts, the article explained, was the institution of "hiring freezes and reductions in staff through attrition, tuition and fee increases, and cuts or restrictions in travel, staff and program or course offerings." None of these options are especially easy to implement and their results can have a far-reaching impact upon the colleges and the students that they serve.

A careful analysis of these options will clarify their impact upon the curriculum. The consequences of each course of action for dealing with such cuts will be explored.

Community colleges have always been known as responsive institutions, responding to the changing educational needs of the communities they serve and to the individual academic needs of their students. In difficult economic times, this becomes increasingly difficult but not impossible. Under fiscal stress, community colleges have been resourceful in finding ways to maintain excellence in the classroom and in student services. Unfortunately, as the economy worsens over a long period of time, their resourcefulness can be taxed to the limit.

Community colleges have used a number of ways to cope with meager budgets -- some of them good and some bad. Community colleges that protect the integrity of the instructional/learning process will emerge from a fiscal crisis as strong, if not stronger, than those that succumb to a "quick fix" method of adapting to inadequate funding.
There can, however, come a point at which not even the most resourceful college will not suffer a diminution of instructional quality.

Although this paper presents the views of a community college president (some may say a management perspective) the views of faculty and administration cannot differ significantly if the coping endeavor is to be successful.

TOTAL CAMPUS INVOLVEMENT

An important ingredient in any solution to fiscal crisis must involve all the players in the game. Management should not be surprised at faculty ire when management institutes stratagems outside the governance structure. Consultation and discussion will go a long way in preventing faculty unrest and providing strong faculty participation in cost-saving measures.

THE IMPACT OF AN ECONOMIC DOWNTURN UPON ENROLLMENT

Fiscal hard times for a community college can be a mixed blessing. Surprising as that statement may appear, it is true. A downturn in the local, the state or the national economy frequently means increased enrollments at community colleges because they provide affordable education. During such hard times, an increasing number of students will either begin their liberal arts or business education at a community college with the intent to transfer to a four-year institution, or they come seeking career and technology programs that will give them new or improve job skills. In troubled fiscal times, the community colleges become havens for the recently unemployed or for their children.

DECREASED STATE AND COUNTY REVENUES CAUSE THE HARD TIMES

The increased numbers of students will generate the necessary resources both to meet increasing instructional demand and to replace shrinking or missing revenues. In New York State this occurs in two ways, but at two different times. As more students enroll each semester, tuition revenues for that year increase. It is primarily this revenue source that allows the community colleges to adjust current budgets to the need for more classes. Frequently the increased dollars may exceed the expenditure demand resulting in unanticipated revenues that will accrue as fund balance or a surplus for the following year. Since community colleges in New York State receive their funding based upon prior year enrollments, any increase in full-time equivalent students is not realized until the following years. Because of this, in two years of New York State funding cuts, some community colleges actually received an increase in state aid based solely upon increased enrollments in the prior year. While receiving state aid in the following years buffers future economic down-turns, it does nothing to offset current year budget needs.

In states such as New York, where the community college system is funded by three sources -- tuition, state aid, and local sponsor support, the fiscal crisis is exacerbated by the
third partner, the sponsor of the community college. Local sponsors are frequently the county or counties that a community college serves. In difficult economic times these sponsoring counties are the first to experience fiscal hardship. Aid to many community colleges simply does not increase to meet even the smallest of CPI increases. Were it not for a New York State law which prohibits sponsors from reducing funding below prior year levels, counties, because of their fiscal problems, would probably reduce their revenue share.

In a prolonged economic downturn, such as the one New York State and other states have faced over the years, we see the genesis of the hard times that community colleges are currently facing. In New York State, community colleges have seen years of support by both county and state governments suddenly stop or, in the case of the state, actually decrease for two consecutive years. Both the counties and the state have increasingly turned to the students to shoulder a larger share of the revenue burden. Some have viewed this recent turn of events as a backing away from what was originally intended to be an equal revenue partnership with each partner providing one-third of the revenue. Others are even more alarmed at the reduction in state aid as signalling an abandonment of commitment to community college education.

The recent restoration of aid by the New York State Legislature in the FY '94 budget bodes well for community colleges, but it must be recognized that state support is still below levels of three years ago.

TUITION INCREASES ARE NOT THE ANSWER TO REVENUE SHORT FALLS

The answer to hard fiscal times is not, therefore, the expectation of significant additional funding from states or counties, despite the ever increasing tuition burden that is being placed upon students. Community college student tuition increases are reaching alarming heights across our nation. Community colleges are fast approaching a point where their tuition rates may actually restrict access rather than allow it as was the original intention. Community colleges, much like the land grant colleges, were to be the people's colleges.

It is amazing that the community colleges of the City University of New York now have the highest tuition rate of all New York State community colleges. Some see this as a possible erosion of the equal revenue partnership of student, state and sponsor. For some it signals what may be a far reaching philosophical mission change as well. To raise tuition further would only exacerbate an already serious issue of access.

MEETING FINANCIAL EXIGENCIES

Having described the origins of the hard times that community colleges face, we can turn to methods that have been used and methods that should not be used in coping with fiscal exigencies.
IMPACT OF REDUCING OTPS APPROPRIATIONS

Above all, the instructional process must be maintained at a sound educational level. It is axiomatic that, in hard fiscal times, the classroom must be protected. That usually means that the instructional process must be preserved above all else. This usually translates into providing classes for students while other services are reduced or, in the extreme, eliminated. The net result is usually a reduction in OTPS (Other Than Personal Services) expenditures. Less equipment is purchased, including instructional equipment, i.e., computers, microscopes, maps. Supplies are in short demand, especially for laboratory courses. Finally, service contracts are severely cut.

All of these translate into a reduction in the quality of instruction in the classroom. Little or no technological advancement or change occurs in the curriculum. During these times, faculty become creative and substitute experiments or learning experiences. This will work for a short period, but not over a prolonged period. OTPS budgets should not be reduced below the prior year's level.

A reduction in these expenditures will cause an overwhelming burden in the future when attempts are made to restore funds to these appropriations. This approach is not without its impact on the instructional process, since inflation, as low as it might be, erodes the spending power of a flat-funded appropriation.

Notwithstanding all of the above, these appropriations are not going to make much difference in the typical college budget. We, like all other colleges and universities, are a labor-intensive enterprise. On average, most institutions are probably spending no more than 15 percent to 20 percent of their budget upon OTPS expenses. Most institutions are spending 85 percent of their budgets for salaries and fringe benefits. The potential for real savings or reductions clearly lies in personnel reductions and concomitant reductions in fringe benefits.

ADDRESSING REVENUE SHORTFALLS THROUGH PERSONNEL REDUCTIONS

But to make reductions in personnel creates another Gordian Knot. To cut faculty lines, for instance, is squarely in opposition to the premise that you must protect the instructional process at all costs. That dilemma is frequently solved by cutting non-teaching personnel. The first to go are usually maintenance positions, but such reductions are ill-advised. To make significant salary savings from custodial and maintenance personnel requires large numbers of those persons. When that happens, the quality of life on the campus is greatly diminished. I believe that clean classrooms, labs and offices are an essential ingredient in the learning environment. Dirty classrooms and campuses send more than a subliminal message about the level of excellence that we want in our students. Students learn better in well-kept and well-maintained facilities.
REDUCTIONS IN MAINTENANCE AND STAFF POSITIONS

Savings obtained from reductions in maintenance and custodial staff are not real savings since they eventually come back to haunt an institution in the future. The lack of preventive maintenance creates a future price that far exceed the original "savings." The cost of the repair and, frequently, the replacement of buildings and major equipment not properly maintained can be staggering.

If not the physical plant staff, then which positions should be cut in order to affect necessary savings? Perhaps staff positions should go. Again, there is not much savings in these positions, and after all, they, too, help maintain the quality of life in the classroom and on the campus. Administrators are certainly a possible target and administrative staffs should be lean, but even with administrative cuts you can reach a point of diminishing returns. There are still essential things that administrators must do as managers and, most importantly, as leaders.

In the interests of protecting the instructional process as it relates directly to the classroom, some colleges have chosen to reduce the number of service hours for ancillary learning programs. Tutoring labs, the library, museums, counseling, admissions and registration hours are frequently cut. While the impact of these cuts can be immense, the real savings are meager.

REDUCTIONS IN FULL-TIME FACULTY LINES

Eventually, the obvious target for reductions are full-time faculty lines. After all, they are the most numerous positions in the college -- at least, they should be. Cutting even a few full-time faculty lines results in far greater savings than cuts in many staff lines. So the target is large and visible and all too easy to choose.

THE USE OF PART-TIME FACULTY

The most apparent way in which to do this and still protect the classroom is to fire full-timers and hire part-timers. It is all too easy and many an institution succumbs to this method of cost-reduction. Of all the methods, this is perhaps the one that can have the most direct impact upon the academic integrity of the curriculum. It has nothing to do with the quality of the part-timers that are hired. It is assumed that they will be qualified. Adjuncts frequently bring a "real world" experience to the classroom that benefit students.

The balance, however, between full-time and part-time faculty is critical. Having too many part-timer faculty can adversely impact the institution since there will be fewer full-time faculty to carry out the myriad of out-of-classroom activities that are an integral part of curriculum and departmental processes. Curriculum design, development, and revision, academic advisement of students, development and revision of courses, textbook selection, development of instructional aids, evaluation of colleagues, hiring of
faculty, departmental budget preparation, governance, and a host of other essential activities make up the total responsibilities of full-time faculty members. Part-timers are not as well-informed nor as available as full-time faculty to counsel students or to tutor them as the need arises.

It is, therefore, the quantity, not the quality of adjuncts who are hired that can cause the problem. When it comes to the budget crunch, some colleges over-use adjuncts creating a disconnection between faculty members, and the college and/or department and ultimately a distance from the curriculum for the students.

The use of part-time faculty in lieu of full-timers must also be considered from another perspective. Giving up full-time lines during a budget process in public higher education is tantamount to lowering for a long, long time the number of faculty lines in the budget. Once given up, they are virtually impossible to recover in future budgets. When these positions are introduced in future budgets they drive up the salaries appropriation dramatically.

**BUDGET COMMUNICATIONS**

Having said all of the above, how then do you adjust a budget in difficult fiscal times? To do it effectively and with the least amount of pain and anguish to students and faculty, there must be involvement in the budget process. It is absolutely essential to advise appropriate student and faculty organizations of the major elements of the budget, both on the revenue as well as expense side.

Notification to the students and faculty is usually helpful in enlisting their help in lobbying the state and county legislatures for adequate support. Beyond that, it forewarns the students and faculty of impending adjustments to the budget that are outlined below.

**CLASS SIZE INCREASES**

The first steps to making salary reductions that will not significantly impact the instructional process is the review of class size. In many instances, class sizes can be increased slightly. It is not difficult to eliminate several sections in each academic department in this way. Care and attention should certainly be paid to the nature of the class and whether a larger class size is academically sound. The addition of several students to classes can go a long way toward reducing expenses. The size of the reduction is, of course, dependent upon an economy of scale. Larger institutions can do this with greater ease and with larger savings. Although smaller institutions will not have significant savings, however, the need to reduce expenditures there should also be smaller.

Faculty must be willing to shoulder this additional burden. By increasing class size within reason, and in an academically sound manner, full-time positions are preserved within their respective departments.
EARLY RETIREMENT INCENTIVES

Perhaps the most frequently used method to reduce full-time faculty expenditures has been the use of retirement incentives. This allows institutions to reduce faculty salary costs but not the number of faculty in the classroom. Again, larger institutions will experience greater savings as will older institutions with older faculty. In most cases senior professors will be replaced by junior professors at the lower and less costly ranks. This also provides the institution with the opportunity to shift faculty positions from low enrollment departments to high enrollment areas. In some cases the retiree's line is not immediately replaced leading to even greater savings in salary.

POSITION HIRING PLAN -- DO NOT FILL ALL LINES

This technique can be used whether there are incentives or not. Some institutions will not eliminate faculty positions from the budget but will not fill all of the budgeted lines. This can lead to significant savings while allowing the institution to adjust to the changing faculty needs across the campus. This method of savings protects public institutions in a very important way. It allows for salary savings without giving up faculty lines. In most situations, as stated above, once a line, faculty or otherwise, is removed from a budget, it becomes very difficult to restore that line in future budgets. Restoration of lines is never seen as such. Attempts at restoration are always seen as "new" lines requiring extensive justification as to need.

TEMPORARY AND ONE SEMESTER FULL-TIME FACULTY POSITIONS

Another method is the use of "temporary" full-time positions in those departments that have greater faculty needs in the Fall compared to the Spring. Faculty are hired as one semester faculty with all the rank, salary and privileges of a full faculty member but with no guarantee of future employment beyond the given semester. In some cases, when enrollments materialize and budget permits, these persons are continued for the next semester. Should this process continue over a period of years, some institutions have agreements with their unions to move the person to a tenure trackline and credit prior years service toward tenure. This, of course, is predicated upon the fact that they have been evaluated in their early years in the same manner as tenure track faculty.

These expenditure reduction strategies all have one thing in common: They attempt to preserve the number of full-time faculty in the classroom or, at the very least, the number of full-time faculty lines in the budget. The educational importance of these lines to the academic integrity of the curriculum has been explained above.

IMPORTANCE OF COMMUNICATIONS

While this discussion seems almost elementary, unfortunately some institutions seize the quick and easy route to coping without fully exploring creative and effective ways
to reduce expenditures. Since many of these effective methods require the understanding and support of faculty and student leaders it is essential to maintain open and frequent communication.

Community colleges can meet fiscal challenges without unduly impacting upon the academic integrity of the curriculum. It simply requires a cooperative, thoughtful and creative approach to revenue shortfalls. Once a budget stratagem is devised, it must be understood and accepted by the college at large in order to implement it successfully.

All of this takes time and patience, but in the final analysis it will be well worth the efforts. Such efforts will pay dividends in attempting to deal with hard fiscal times with the least amount of damage to the college, its curriculum and its students.
FACING HARD TIMES AT COMMUNITY COLLEGES

B. FACING HARD TIMES AT NASSAU COMMUNITY COLLEGE:
A UNION PERSPECTIVE

Philip Y. Nicholson, President
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These remarks will be better understood if they are taken
in the context from which they emerge. Hence, a brief
introduction to establish that foundation will precede my more
specific commentary.

Historically, Nassau Community College has more than 25
years of experience with collective bargaining. Our first two
full-time faculty contracts, negotiated in 1968 and 1971,
sought to combine the highest standards of academic
professionalism, as described by the AAUP Guidelines, with
compensation and benefits comparable to those prevailing in
the New York metropolitan area. Our history has consistently
recognized the close interrelationship between high academic
standards and our ability to reach successful collective
bargaining agreements. Democratic self-governance and
professional accountability, as established in our contracts,
contributed to an excellent reputation of our faculty and
staff which has only been reinforced by the remarkable success
of our students over the years. Our organization, in every
negotiation, has taken the view that our institution is a
valued engine of social and economic production, not a drain
on scarce public resources, despite the immediate and real
revenue shortfalls experienced by both our local and state
sponsors in a time of economic contraction. We have lived
through, and attempted to negotiate through, economic peaks
and valleys before, and consequently have benefitted from the
knowledge and maturity gained from these experiences. In the
fiscal reality of the last two years, the observations that
follow include both positive accomplishments and down-side
dangers that will affect us specifically, and community
colleges in general. Eternal educational optimism prompts me
to review first some of the damage suffered in the last two to
three years in order to conclude with more positive comments.

Our institutions have been serving an increasingly large
cohort of our community's high school graduates over the last
generation. During economically pinched periods, our
enrollments surge even further ahead for rather well known
reasons: Costs, local employment, retraining, etc. The New
York Times featured NCC in a February 6, 1993 "Your Money" article entitled, "How They Do It: The Community College Route to a Lower Cost Bachelor's Degree." An NYU graduate was shown to have saved herself and her family $29,000 by attending NCC for the first two years of her four-year experience. Of course, there is a much broader increase in the demand for public services of all kinds in a period of economic contraction and we are part of that trend as well. The pressure point is reached when this increased demand for our services is met with shrunken public resources. New York State has actually cut its FTE support to NCC in the last two years from $1,725 to $1,600 while Nassau County has frozen its real estate tax-based share for five years, thus not absorbing any inflationary corrections. There are hard consequences as a result. Tuition has increased more in the past two years than in the prior 10, and student/faculty ratio is up by 10% on average, to our contractual limit of 21:1 college-wide.

The tuition hikes, combined with new financial aid and eligibility requirements, along with more stringent attendance and record-keeping regulations, may improve accountability but will most certainly lead to more restricted access. Limits on access threaten the very mission of community colleges. For us, this remains more of a potential danger than one we can delineate now, since enrollments at NCC have continued to rise over the last three years.

One of the perceived cost-efficient techniques for accommodating increased enrollment is a form of speedup; we have added a third summer session and a winter term in January between the Fall and Spring semesters. These are two to three week mini-semesters which have raised some educational questions, but have added to our revenue flow while providing additional overload and adjunct teaching opportunity to faculty. We are currently planning to introduce a Week-End College to enable students to pursue full degree programs outside of the traditional work week.

These new programs and enrollment increases have prompted greater reliance on overload and adjunct faculty rather than the addition of new full-time faculty. The latter have remained fixed (or down slightly) due to as yet unfilled positions made vacant by retirement incentives offered by our contract or by New York State. All of our student services, including Admissions, Registrar, faculty advisement and Counseling, struggle to maintain high quality without adequate full-time personnel. Some services inevitably suffer: Lines are longer, advisement is less thorough, and other shortcuts are made necessary.

Increased use of part-time and adjunct faculty has specific consequences as well. While cultural diversity and affirmative action goals are sought, adjunct hiring and assignment are generally made from qualified experienced faculty drawn from availability pools and lists built up with some regard for seniority (contested everywhere). Fewer new faculty hired mean less comprehensive searches. Even new adjuncts are drawn from our local or immediate region as talented, available women or minority candidates can hardly be expected to uproot themselves for the uncertainly and low
salaries of part-time employment. In short, we now offer our students a less diverse faculty, and risk falling behind, as opposed to realizing gains, in affirmative action.

Another consequence of the economics forced on us by more use of adjunct faculty, service shortcuts and speed-up are the reinforcement of stratification mythologies and realities community colleges have always endured. It is one thing to suffer the stigma of low cost in our material world when we know that our high quality academic program is secure. Community college students need and deserve the attention of full-time, tenure-track faculty as much as students in any other segment of higher education, but they are more and more likely to encounter part-time faculty. Long waiting lines, heavily utilized facilities, crowded classrooms, limits on elective course offerings, service and equipment cuts, and more adjunct faculty, unless checked soon, will increase the social stigma and diminish the democratic qualities of community colleges. More graffiti may just be an outcry against the downward mobility sensed as their destiny by some of our students.

Community colleges have always struggled to establish an institutional identity. The comprehensiveness of their programs, their broad mission as transfer, vocational, remediation and retraining institutions, and their identity with regional needs have made them the most universal and democratic institutions of higher education in the nation. If hard times debilitate this democratic identity, everything else may be jeopardized as well. The barbarians who condemn what we do are at the gate, indeed, some have entered the City.

Taxes perceived as too high, unfair, and spent foolishly in recessionary times, have emboldened traditional critics of public higher education budgets, including ours, have mobilized extremist critics of our curriculum, giving them new fronts. College courses such as Human Sexuality, considered mainstream a few years ago, have come under attack by splinter group ideologues who, in the current recessionary era, are more vocal and have gained some political support. Our two most recent trustees attack our health course along with the concept of tenure. They oppose sabbatical leaves and, joined by one or more others, have fought vital budgetary and contractual decisions, thus forcing periodic crisis situations that destabilize the institution.

In the last two years, we have been to the highest courts in New York State to defend academic freedom. Newspaper headlines and local television features grotesquely simplify these controversies. More fiscal cutbacks will embolden, and have the potential to empower, those who condemn the mission of democratic public higher education itself. Government officials respond to my critical comments about some of their trustee appointments by noting the need to be responsive to all segments of the community. They also remind me that these hard extremist views have only two of the ten board seats (for now). Other community college boards, like thousands of American school districts, will have similar or worse political experience to report.
While our institutional response to current fiscal stresses have indicated some leaner and meaner results, there have been important accomplishments as well! Realistic collective bargaining with college and local sponsors have provided all participants with important gains; a win-win-win situation. Some examples follow:

Our 1991-95 collective bargaining agreement included a one-time, two week lag payroll; the first negotiated in Nassau County that dealt with an immediate fiscal shortfall. A salary freeze in the first year may have been the first negotiated in New York State. Five incremental salary steps for all unit members and COLAs in three of four years have kept our scales among the best.

The college gained an upgrading of degree requirements for non-classroom professionals while extending their probationary period for tenure. The College, the County and the union looked at their own needs and at each other's needs realistically and, in the give-and-take of collective bargaining, achieved what they each needed most without sacrificing anything regarded as vital. None of the participants left the process embittered or with a belief that one or another side had prevailed unfairly over the other.

Media critics, political opportunists and other outsiders to the process attacked the settlement. It was out of step with the times; contracts weren't being made. It would be too expensive. But the agreement held up because of its balance and the common desire of the three parties to advance the interests of the college while respecting the specific and legitimate goals of each other. It is a delicate balance, by no means guaranteed indefinitely.

Our organization, the Nassau Community College Federation of Teachers, has sought in the last six years to offer support and assistance to the local sponsor in articulating value and efficiency to the community of Nassau Community College. We regularly attend the public meetings of both the Board of Trustees and the County Board of Supervisors (soon likely to become a county legislature) to promote understanding of public higher education. We have assisted the Office of Employee Relations and the Office of College Relations in the preparation of publicity materials. The College has reciprocated this exchange with materials (photographs) we requested for an AFT booklet promoting community college collective bargaining. We are participants with board members of the College Foundation, which seeks supplementary financial assistance for scholarships and faculty projects from the local private business and banking community. Our participation includes support for fundraising activities, advertisements, and social functions.

Our state affiliate has established one of the most respected and forceful educational lobbies in the nation, and we join forces with the K-12 organizations, as well as with community college presidents and SUNY and CUNY groups, in common efforts to promote our fiscal needs. Most recently (March 1-2, 1993), our political action committee joined a SUNY day program in Albany with NCC students, administrators
and the College Board of Trustees' Chairperson that included a candid and thorough discussion over several hours with State Senators and Assembly members from Nassau County. We are convinced that the effectiveness of all these activities is cumulative and incremental rather than dramatic, and includes building the base for future collective bargaining agreements.

In a 1992 publication of the Economic Policy Institute entitled Unions and Economic Competitiveness, the editors, Lawrence Mishel and Paul B. Voos, gather the most comprehensive collection of econometric studies of national and international business, and of industrial organizations, demonstrating the efficiencies and economies of high levels of unionization.

In higher education, democratic governance secured through collective bargaining generates comparable economies. Unionized faculty, empowered and fairly compensated, create new programs in ESL, Honors, Radio and TV utilization, and multi-cultural and cross-disciplinary curriculum reforms with far less administrative expense and bureaucratic structure than would be likely without a collective bargaining agreement.

Moreover, the programs are, for the most part, effective in achieving their objectives. The Mishel and Voos model, if applied to higher education, would, I believe, confirm the hypothesis that democratic academic governance secured by collective bargaining yields, among other benefits, lower per capital administrative costs on an institutional basis than in its absence. Dr. Fanelli, NCC's President, can confirm his relatively flat administrative costs over the last ten years as evidence of this as well.

Finally, the expanded practice of democratic decision-making as part of a response to fiscal exigencies yields high levels of credibility and accountability for all parties. The College, the academic departments, our Senate and the union itself deal with divisive issues, confront controversy, and juggle awkward priorities of budget and personnel. And as difficult, slow and clumsy as it sometimes appears, democracy, as Winston Churchill observed, is better than any of its alternatives.

In this regard, I am reminded of my first participation in a Baruch Collective Bargaining in Higher Education Conference about a decade ago when I heard Boston University President John Silber advocate his version of the opposite approach. Silber's autocratic style and his advocacy of a "genteel poverty" for college faculty were attractive to some members of his audience. Decisiveness, order and economic efficiency are the standard claims of authoritarian wielders of power. Not only are these claims specious and usually false, but autocracy stifles initiative, imagination and creativity; and may now inhibit our national industrial competitiveness as well.

To his own credit, NCC President Sean Fanelli has not succumbed to the temptations of autocracy. He has made himself vulnerable to some criticism by allowing the slower
process of consensus building to achieve this version of a successful institution. Collective bargaining is part of this democratic consensus building, and in the ten years of his leadership, Nassau Community College has emerged as one of the most outstanding institutions of higher education in the nation. If it is ironic to hear this from his union counterpart, it is because his faculty has become among the most empowered and fairly compensated in the nation.

Collective bargaining in a dreary era can result in real economies that hurt, and in real accomplishments that may sustain us, while we await better times to come.
C. FACING HARD TIMES AT RIVERSIDE COMMUNITY COLLEGE

Salvatore G. Rotella, President
Riverside Community College

Without attempting to sound alarmist, let me suggest that community colleges in California are facing more than hard times; we are facing unique times. To borrow a concept from Peter F. Drucker, we may very well be facing turbulent times. A time of turbulence is a time to ensure that the institution will survive, a time to "adapt to sudden change." But it is also a time that management can "avail itself of new opportunities." I tend to believe that this is a time in which union and management may have to seek new opportunities. The worst danger of turbulence is the "temptation to deny reality." If turbulence is, by definition, irregular, nonlinear and erratic, it follows that one cannot plan on the future as a continuation of the present.

Parallel to the concern of managing in turbulent times, we may have to begin to think of collective bargaining in turbulent times. Since turbulence has a course which administrators and union leaders can detect, let me first discuss how we at Riverside Community College have dealt with the situation in the past year or so as a prelude to some thoughts about what we are facing in the future as the turbulence seems to increase.

In a sense, since managing and bargaining deal in large with the allocation of scarce resources, all budgets, as do all negotiations, take place in "hard times." In an institution that has a mission to serve all those who can benefit from higher education, that is, central to the aspiration for social mobility of both young and adults in an institution that exists truly for the community, I can't recall a situation when there ever was enough resources to meet all demands. By necessity every budget can at best accommodate the most pressing issues. In the words of Herbert Simon, ours is truly the art of "satisficing." We adjust the internal variables to the external environment; if that environment is relatively stable, with good will, meaningful change and adjustments can be brought about, if not in the short term, at least over the long term.
But the external variables in California, the general economy of the state and the funding for education for the foreseeable future promise turbulence. In Southern California this is aggravated by the fact that the demand for college admission is growing in such a manner that in an area such as that served by Riverside Community College, if the economic situation does not improve, it is hardly an exaggeration to predict that within three years the number of students turned away will be larger than that of students served. The open door was shut long ago. Operating on the premise of open admission is already resulting in inefficiency and will lead to chaos. This is truly a time of turbulence.

SENSING THE IMPENDING ECONOMIC CRISIS

When I arrived on campus over a year ago, it was quite clear that the state economy was in trouble. However, the most important task on hand was to bring to a halt some internal difficulties of the college. Previous negotiations had lead nowhere. If the settlement of a contract is critical to the union, it is equally important to management. No budget can be completed without knowing the cost of faculty salaries; that settlement becomes the guideline for all other categories of employees. Between April and June of 1992, every effort was made on my part, almost to the exclusion of other concerns, to get a contract with the faculty. A professional negotiator had been representing management for an entire year of hopeless negotiations. Following a practice that I had used at a previous institution I took an active part in the negotiations as president of the college, though I did not sit at the table.

The settlement that was reached in June had two features that, in retrospect, reveal that as early as a year ago we, the union and management, could already sense the impending economic crisis. The salary increase, which was scaled down to a percentage one or two points above the cost of living, was divided into two equal installments - the first one to be given in September, the second to be given in the ensuing spring on condition that state funding which is given twice a year would be the same or above the rate at the same time the previous year. This agreement is to prevail for the next year, which will be the last year of the contract.

While a raise, or portion of it on contingency, is not a prevailing practice in negotiations, in retrospect the entire college applauds the union leadership for accepting this settlement. For the short term the institution has been saved; and we hope that for the year to come no reduction in personnel will be necessary.

The other provision was to agree to assist certain retirees with health care benefits. The final decision has been entrusted to a joint committee of union and management which will make recommendations to the Board. The most important issue was to settle the contract and get a sense of financial commitment.
The situation faced this year by community colleges in California, especially by our institution, can be best described as stationary, surrounded by a mounting sea of needs and change. Cost affordable public higher education, the pride of California until a few years ago, may be a thing of the past. Fees are increasing steadily in all three segments of higher education. Community colleges have gone from no fees to a current fee of $10 per credit hour and face the prospect of an increase to $30 for the next year. In comparison with the rest of the country, even a $30 fee per credit hour is competitive. However, the sudden increase and the lack of financial aid will have the effect of dividing the population into two groups; one which will invest in education and one that cannot afford to invest or will not in part because they never have, and do not see clearly the benefit of the investment. First generation college students and minorities - especially Hispanics - comprise the largest part of this latter group. Economically and socially, society is being driven into two camps.

A balanced budget for next year is possible only with major cuts in non classroom-related expenses, one time adjustments and changes, incentives for early retirements, increases in service fees and a shift of resources from administration to teaching. The latter is not so much an economic measure as it is the result of a concerted decision to make the faculty more central to the operation of the college and to shift day-to-day administrative responsibilities to department heads. Division deans with no teaching assignments are being eliminated. This shift is also permitting our college to develop the first phase of a new administrative structure that will lead to three autonomous campuses.

In 1991 RCC opened two satellite campuses, one in Norco-Corona and one in Moreno Valley. The first phase was built for 2,500 students and over 4,000 are being served right now. Construction for Phase II is about to get under way, with expected completion in two years. By that time, over 8,000 students could be served at each of the two new campuses. Unfortunately, at this moment, the prospect for operational funds is unclear.

For this academic year and the next, all resources are stretched to the maximum. Administration will be reduced, but at the same time, demand for admission is greater every day. The other two sectors of public higher education are in similar economic conditions, and advise the many students they turn away to go to the community colleges. Times are just as hard for the University of California System and the California State System; the only difference is that the funding in these two systems seems guaranteed regardless of the number of students served. Community colleges, on the other hand, must maintain the number of credit hours generated or receive further cuts. While educational institutions are standing still, the environment in certain parts of the state is changing quantitatively and qualitatively. Phenomenal growth is expected in population. High paying jobs will
become scarcer. The state is experiencing a net loss of manufacturing jobs, the defense industry is disappearing and most military installations are slated for closure. Riverside County has a large Hispanic population; some elementary schools are over 60% Hispanic, but insufficient funds exist to reach out to minorities, or to attempt to serve meaningfully the many students at risk.

PROSPECTS FOR THE FUTURE

With this situation, how can we factor raises for faculty and staff in future negotiations? For community colleges like ours, increasing productivity in a traditional sense is out of the question. Classes are over-filled with students. In spite of agreed upon maximums, faculty members extend themselves and allow additional students in their classrooms. Our faculty is perhaps the most overworked faculty I have observed throughout the country.

Cooperation and good faith are of the essence between administration and faculty, including the Senate and the union, if we are to explore new ways to serve the students. Should we return to the lecture hall approach, with special support services for those in need? Have we explored fully the use of technology in reaching students? With so many people not served at all, could distance education through television, radio and/or computers provide at least in some way alleviate of the problem?

If the turbulence persists or gets worse, these are some of the options to explore. One hopes that our faculty may come up with others. Otherwise, in order to function efficiently, a system of priorities for enrollment and rigorous assessment will be necessary, or the problem of turning away students will be aggravated by serious inefficiency.

Plans for future programs or for change in current operations have led to an aggressive search for alternative funding, alternative resources and operations through partnerships. The thought of prospective programs for our new campuses can be entertained only by seeking out new resources. This can be exciting, however to enter proper partnerships the College must make its own contribution so that it can demand terms that are consistent with, and conducive to, acceptable academic standards.

If resources diminish as predicted, the very existence of the institution is at stake. State rules and regulations which were created to maintain the community college as an open door institution and as an opportunity for the many, make downsizing a difficult option. If statewide priorities for admission are created, and the thought is being entertained by the Board of Governors, there will be some serious political repercussions. Should an 18-year old receive priority over a more mature returning student in desperate need of a better job? How about minority students, especially Hispanics, who in our region will soon constitute a numerical majority and one seriously underrepresented in higher education institutions?
How can we prepare the smart work-force so desperately needed by the economy if the general population is denied access to education?

If hard times continue and the scope of the mission is not reconsidered, community colleges face serious inefficiency. The practice adopted by the State of capping enrollment without guidelines for priority admission has not solved the problem; in fact, it may have aggravated it.

The idea of colleges becoming entrepreneurial and seeking alternative resources appears alluring, but if it is carried too far, the integrity of the institution will be at risk. To return to, and conclude, with Drucker: The worst danger institutions face in a time of turbulence is to deny reality. If resources decrease further, the mission of the community colleges must be reconsidered. The issue, unfortunately, is a political one; one that calls for a realignment of societal values and not one that can be resolved by management, and least of all, by collective bargaining at individual colleges.
IV. YET ANOTHER LOOK AT FACULTY PRODUCTIVITY

A. On Scholars, Dollars, and Sense in the 1990's: Monitoring Faculty Productivity in an Era of Fiscal Accountability

B. What Again? Productivity Issues in Higher Education Today

C. Equity in the Academic Workplace: The Relative Value of Teaching and Research
Over the last decade, an untimely shift in public policy toward funding higher education occurred as a consequence of the hegemony given to political and ideological conservatism in electoral politics. The liberal political strategy of massive, direct social investment in human capital via higher education was drastically curtailed. Policy emphasis moved from supporting the postsecondary educational aspirations of all qualified citizens to supporting mainly those with the greatest financial need (Pratt 1993). Along with this impetus, a major restructuring of the federal role in higher education occurred, leading to relatively severe cutbacks in student aid and research funding (Pruitt 1987). Meanwhile, colleges and universities were simultaneously grappling with catastrophic fluctuations in the traditional student cohorts, the budgetary effects of enrollment declines, the oversupply of faculty and graduates in many areas, and steady-state conditions. These developments, as well as other recession-related setbacks, have accumulated in force and impact over time, thereby precipitating a modest economic depression in higher education (Herbert and Palmer 1993). Here are the roots of the current economic crisis in higher education.(1)

Maladaptive policy changes, inaccurate administrative planning and unanticipated social or economic conditions have also plunged higher education into an economic crisis. To wit, a growing discrepancy now exists between the costs incurred by colleges and universities for operations, equipment, and facilities; and the capacity of many traditional constituents to afford postsecondary education (Shapiro 1993). In brief, like those affected by the current health care crisis, we in higher education are concerned about whether the expenses of research, teaching, and service, threaten to exceed our clients' ability (or willingness) to pay. As a consequence of the unresolved, yet escalating, fiscal crisis in higher education, as well as the recent movement among benefactors toward greater fiscal
accountability, faculty workloads and productivity are under increasing scrutiny in the 1990's by administrators, students, parents, funding agencies, policy-makers, legislators, and media (Jacobson 1992).

In response to the escalating costs of higher education, governing boards and academic administrators at many colleges and universities have flirted over time with new methods of cost accounting or even trendy managerial strategies like the infamous total quality management. The premises undergirding these management techniques did not originate with academic administrators themselves; rather, they have been borrowed from the managerial theories of the business world - without appropriate scrutiny, in my opinion. Faculty are encouraged or pressured to eschew traditional norms of professionalism in order to treat their students as consumers who have to be won over by the former's wit, charm, expertise and pedagogy. This demeanor is allegedly supposed to build customer loyalty and improve product or service quality using strategies for participatory management. Such techniques have been implemented to allocate expenses among specific operations, and subsequently, through directly targeting one's administrative intervention or manipulation, curtail costs. Because they are the most critical aggregate in the budget - given their salaries and other instructional costs - faculty are obvious targets for cost management.

Furthermore, in an effort to survive amidst demographic fluctuations which have affected student enrollments, many institutions of higher education have adapted themselves to an ethos of consumerism - seeking to market themselves to a particular range of customers (Riesman 1982). Admissions and development offices are now subject to sophisticated marketing strategies in an effort to increase the yield of matriculating students. Extracurricular activities, closely tied to consumerist preferences, are also used to lure students. Indeed, since competition for a shrinking pool of traditional students is quite stiff, colleges and universities must prostrate themselves by offering more of what students want as consumers if they are to survive. Both managerial and consumerist impulses within higher education intersect at the ideological crossroads of accountability.

This emerging movement toward accountability begs the perennial question: Is society (or are students, parents and other benefactors of higher education) getting their money's worth from colleges and universities? Since faculty are the most pivotal actors in the educational process, a corollary question is: Are constituents getting their money's worth from faculty? What do faculty do to earn the money we pay them anyway? (Ironically, as I am composing this paper, a student has just passed by outside my office door, saying that he does not think that faculty work hard enough to earn the money they get paid - merely because he could not find a particular professor in his office!)

This paper scrutinizes an array of available empirical evidence about faculty workload and productivity in order to discern whether public concerns about accountability are warranted or overstated. Findings from several data sources
will be examined as they bear upon these issues, including the results of prior studies of academic work, the 1988 National Survey of Postsecondary Faculty conducted by the National Center for Education Statistics, and recent reports from the State Higher Education Executive Officers (SHEEO). Additional findings from the Higher Education Research Institute at UCLA and other minor sources will likewise be examined. Due to space limitations, only major national data sets are discussed in this paper.

MEASURING FACULTY WORKLOAD AND PRODUCTIVITY

Modern preoccupation with the issues related to faculty workload and productivity greatly exceeds in form, substance, and degree, the theoretical and methodological sophistication of the sources of empirical data at hand (Blalock 1982, 1984). (2) Contextual analyses (Boyd and Iversen 1979) of faculty workload and productivity, research that would attempt to isolate individual from environmental effects, are noticeably absent. (3) No known empirical study has tracked changes in faculty workload and productivity – controlling the in-puts or resources – across all types of colleges and universities in each decade of the twentieth century. Comparative data from available sources must therefore be assembled in rather piecemeal fashion, with all the attendant complications and measurement errors thereof. Few studies even consider the effects of measurement errors in their designs or even upon their findings. Moreover, the entire field of higher education lacks a measurement subspecialty, akin to econometrics, which could be devoted to delimiting the conceptualization and measurement problems involved in understanding the relation between faculty competencies, organizational resources, and academic work. Most studies implicitly assume that individual faculty members have complete control over their work environments or are able to manipulate those factors which affect their workload and productivity.

Presently, there is an overreliance on self-reports from faculty obtained from social surveys. While these reports provide some insight into academic work, they assume face validity and need to be corroborated with intense, yet extensive, observational studies across different institutional contexts. Since these reports come from cross-sectional surveys which tend to yield static comparisons by design, longitudinal, panel studies exposing the effects of changing conditions or variables would be useful. Absent systematic basic (as opposed to applied) research on the structure and dynamics of the higher education system as a whole, or even its components or subsystems, contemporary inferences must be interpreted cautiously and regarded as somewhat suspect. That is to say, it is difficult to draw valid and reliable inferences about the productivity of individual faculty without rigorous controls for organizational conditions, resource funding and other extraneous factors. We just do not have the type of data we need to answer complicated questions about academic work. Consequently, scholars in higher education are just beginning to unravel the dynamics of faculty workload and productivity in this decade.
In a real sense, then, a precise definition of what constitutes productivity, net extraneous influences, is at present, elusive and problematic. For faculty at research universities, productivity is usually measured by publications. For faculty at institutions where the teaching function is imperative and paramount, productivity is a function of the number of courses taught relative to the number of students enrolled in each class. For scholars in the sociology of science, productivity may be measured by citation rates or indices (Cole and Cole 1973). Yet, in most publications, productivity is not defined at all - it refers to how faculty distribute their time among varied professional duties as well as to how well they fulfill these responsibilities. Thus, the analytical notions of efficiency and efficacy are typically confounded. For purposes of clarification, most of the empirical evidence I include in this report inclines toward the common idea of faculty productivity.

**EMPIRICAL FINDINGS**

Misconceptions about faculty workload and productivity are not new (Stecklein 1961). Faculty workload and productivity considerations must be placed within the overall context of an academic career, if they are to be accurately understood. Besides merit, this career is subject to various institutional constraints. Indeed, the normal faculty work week is complicated by a plethora of activities including classroom teaching, class preparation, advising, committee meetings or administrative work, and public service. As far back as the 1954-55 academic year, Stecklein observed that faculty workload varied by institutional characteristics ranging upward - in two out of three institutions he studied - across all ranks in the proportion of faculty who allocated fifty percent or more of their time to instruction (p. 30).

During the 1960's, Fulton and Trow found that three out of four of the 60,000 plus faculty in the 2,500 colleges and universities they surveyed favored teaching to research, prompting them to comment that higher education in the United States was primarily a teaching system (p. 33). Furthermore, Fulton and Trow noted that less than twenty percent of their faculty respondents, presumably those at research universities, spent more than nine hours per week in teaching in contrast to eighty percent of community college faculty doing so (p. 37). From these studies, it seems that the pattern of workload duties is a function of institutional location as well as the individual motivation, competencies, and other traits of faculty. More recent studies of academic work have re-iterated this observation (Blau 1973; Cole and Cole 1973; Clark 1983).

Martin J. Finkelstein (1984) recently devoted an entire monograph to assessing the available research about academic work from the 1940's to the 1980's. Finkelstein's book is a compilation of the findings he discovered from a rigorous content analysis of over 300 empirical studies of faculty published since the Second World War. Because his findings provide a rather nice historical context for more recent studies, they can be used as a baseline for interpreting the
evidence presented henceforth in this paper. From the results of Finkelstein's voluminous investigation, we observe that persons attracted to the academic profession are highly intelligent, intrinsically motivated, and mature individuals. Finkelstein gives a psychological portrait of faculty members as habitually achievement-oriented individuals who valued their work and autonomy enormously (p. 44). His findings do not support a portrait of college professors as lazy professionals out to evade their work responsibilities.

There is no indication that those who covet as well as practice an academic career have ever had a systematic aversion to their teaching duties (pp. 106-120). On the contrary, Finkelstein reports that: (1) most faculty are by far more interested in teaching than research, (2) Faculty spend far more time preparing for and engaged in teaching than research (pp. 87-96). In those studies cited by Finkelstein, most faculty have very little time to devote to research purposes with one such study reporting less than four hours per week being allocated to research (p. 87). Ohwly, faculty role responsibilities were again a function of institutional type and mission.

Research university faculty assume their academic appointments realizing that their employing institutions are organized in such a way that research and publication duties take precedence over classroom teaching alone in their quest for promotion and tenure. Still, Finkelstein cites a major study, conducted by Ladd (1979) where even one-third of those faculty respondents at research universities spent nine or more hours directly engaged in teaching (p. 88). Within the same study, half of the faculty respondents from research universities devoted nine hours or more to class preparation (p. 88). Despite these pressures, sixty percent of research university faculty in the survey also allocated at least nine hours to research activities.

At other doctoral universities included in Ladd's investigation, fifty-six percent of faculty engaged in teaching at least nine hours while sixty percent arranged a similar amount of time for research. Respectively, comprehensive institutions and liberal arts colleges (including community colleges) had seventy-eight and eighty-two percent of their faculty so involved in teaching, with sixty-one and seventy-four percent conducting research. Across all categories in the survey, sixty-six percent of faculty spent nine or more hours in teaching. Fifty-eight percent of faculty devoted similar time to research. Judging from these data alone pressures for teaching and some research are ubiquitous in the academic role among various schools.

Finkelstein presents other compatible studies for the purposes of comparison. A survey by Bayer (1973) showed that forty-two percent of university faculty respondents in contrast to sixty-seven percent of faculty at four-year institutions spent nine or more hours in teaching. Almost fifty-four percent of university faculty also spared at least nine hours in class preparation during the same study. In another study by Baldridge, et al. (1978), the same pattern is discernible: Research faculty are the most likely to spend a
higher proportion of their time on average devoted to research instead of teaching. These initial findings by Finkelstein, coupled with more recent empirical data, show that faculty as a group have always been productive in conformity to institutional prerequisites, albeit in different ways. Faculty workload and productivity seems, according to Finkelstein, to be a function of differential reward systems, workload assignments, and recruitment strategies among institutions by type (pp. 91-101). Abuses within and exceptions to this dominant inertia have been few and far between. Perhaps that is what makes them so sensational.

Finally, Finkelstein's research contributes to current concerns about faculty productivity or effectiveness in teaching undergraduates. Some influential pundits have suggested that faculty throughout the higher education system should consider redirecting their research efforts in a way that would enhance teaching effectiveness (Boyer 1990, Schilling and Schilling 1993). However, empirical research indicates the dimensions, and outcomes of faculty productivity can not seemingly be legislated by merely transposing teaching over research responsibilities within the faculty role (pp. 120-127). From the massive evidence considered by Finkelstein, we observe that - according to most studies - research productivity and teaching effectiveness vary independently of each other (p. 122). To that extent, time allocated among these activities is not entirely interchangeable for faculty as a whole. It is most probable that powerful social mechanisms involving self-selection operate with regard to these workload components, both individually and institutionally (p. 95). To wit, some faculty have predilections which incline them toward being productive researchers while other faculty have similar predispositions toward teaching effectiveness. In general, the pursuit of research enhances rather than detracts from teaching effectiveness (p. 126).

Commenting on the changing demographic and economic contours of academic work, Bowen and Schuster (1986) further reiterate Finkelstein's basic findings. They write, "Over recent decades, the basic duties of academic people have remained largely unchanged." (p. 69) As evidence they cite the findings of a survey conducted by the National Science Foundation to determine the work week of full-time faculty in science, engineering and social sciences for the 1978-79 academic year (p. 73). According to this study, faculty at four-year institutions averaged 45.8 hours per week engaged in academic or professional work. At universities, the work week was slightly longer: 48.2 hours. Faculty at public colleges and universities worked approximately 47 hours weekly in contrast to the estimated 43 hours performed by their colleagues at private institutions. Typically, longer work weeks tended to be associated with institutional type, academic rank and possession of the doctorate.

The data compiled by Bowen and Schuster also record that university faculty themselves gave almost fifteen hours per week to both teaching and research, although slightly more time was devoted to research: 14.9 vs. 15.6 hours respectively. Their counterparts in other four-year schools
only averaged seven more hours of teaching per week while averaging nearly ten less hours in research. Faculty at universities also spent more hours in public service and consulting activities. Using other data sources—including those from the National Center for Education Statistics—Bowen and Schuster show conclusively that teaching loads for all faculty, as measured by statistically-adjusted student/faculty ratios, have increased since the 1959-60 academic year from 18 to 1 to 19.8 to 1 in 1982-83, the period of their most recent data. Lastly, survey data obtained during 1980-83 from chief academic officials at 100 public and 100 private colleges and universities, supplied by Minter and Bowen (1982), expressed conclusively that faculty work performance was either consistent with past standards or improving (pp. 77-79). Decreases in every cited category were nearly inconsequential. These results should be compared to those already furnished above. Altogether, they give little credence to popular or contemporary speculations that faculty members are indolent.

Meanwhile, during the 1970's and into the 1980's, a new industry of consultants, techniques and publications was launched by researchers in higher education with the aim of assessing faculty role performance, translation: workload and productivity (Miller 1972; Doi 1974; Genova, Madoff, Chin and Thomas 1976; Centra 1979; Hample 1981; Andrews 1985; Clark and Levin 1986; Licata 1986; Miller 1986; and the work of Peter Seldin is exemplary of this point (1980, 1984, 1990). Undeniably, there has been some modest profit in elucidating more carefully the practical features of academic work. Yet, such efforts were hardly sensitive to the intellectual nuances pertinent to each discipline. This research genre arose ostensibly to aid administrators in their quest to improve the quality of their institutions. While these scholars had as their goal the task of improving the assessment of teaching and research competencies among faculty, altogether this work offered little theoretical or methodological improvement in resolving the complications about faculty productivity cited earlier. Perhaps they were a cure evolving before a disease was present, given the findings elaborated above.

To counteract mounting pressures for increased accountability and productivity, some academic disciplines sponsored their own initiatives designed to enhance academic work—especially undergraduate teaching—well before the current polemics were in vogue (Goldsmid and Wilson 1980; Campbell, Blalock and McGee 1985). Faculty have always had a vested interest in their own productivity since it facilitates their mobility and opportunities for further rewards (Caplow and McGee 1958). The most recent, yet rigorous, studies of academic career mobility confirm that salient observation implied already that workload and productivity are a function of institutional type and location (Youn and Zelterman 1988). At teaching institutions, productivity is measured by the quality and quantity of courses taught while at research universities, it is the quality and quantity of a faculty member's publications that count (McGee 1971; Breneman and Youn 1988). Faculty workload and productivity assessments must take cognizance of the findings elaborated in the major
prior studies just cited above if they are to be authentic. Invariably, as Fulton and Trow (1969) observed over two decades ago, faculty predilections are matched for the most part with institutional contexts. Only labor market conditions have effectively perturbed this pattern (Cartter 1976). (4)

FINDINGS FROM NSOPF

In an effort to fill the enormous void created by the relative paucity of comprehensive data sources on the nation's college and university faculty, the U.S. Department of Education has recently (since 1987) begun a series of studies which will be completed every four years. Data from the first study about faculty issues was initially released to the public in 1990, with a more extensive summary following in 1991. Several findings from this massive study speak to the issue of faculty workload and productivity and are tabulated below. Once again we see that teaching preoccupies the faculty role, a tendency that has not deviated appreciably from that found in prior studies.

The 1988 National Survey of Postsecondary Faculty (NSOPF), conducted by the National Center for Education Statistics (NCES), found that 56% of the 7,404 faculty sampled spent more than one-half of their time on teaching activities, compared to 16% of their time engaged in research and 13% of their time involved in administration (1991: p. 49). The usual pattern of institutional differentiation observed earlier was evident as university faculty spent less time on teaching than their counterparts in other institutions, respectively 39 to 47 percent. Furthermore, the study showed assistant professors devoted slightly more time to teaching than did the two higher academic ranks.

ALLOCATION OF FACULTY TIME

According to the NSOPF survey, the average work week for full-time faculty was 53 hours. Table 1, taken from NCES's 1991 report on the survey, displays the mean number of weekly hours worked by faculty in 1987 for various types of institutions. Note that faculty at all types of institutions exceed the standard forty hour work week. When these results are contrasted with those reported for the early 1980's by Bowen and Schuster (1986), it is evident that faculty are working more hours per week in the late 1980's (53 vs. 46 hours respectively.) Faculty at research and doctoral universities, as Table 1 indicates, average a slightly longer work week than their counterparts at other categories of institutions. Moreover, research and doctoral faculty actually spend more time working on-site at the institutions where they are employed.

Table 2 reports how faculty from various institutional categories allocated their time among varied activities in 1987. Here the tabulations in the first column show conclusively that research and doctoral faculty spent less time in teaching than faculty in comprehensive, liberal arts, or two-year institutions. Indeed, when the first column which reports data on the percentage of time allocated to teaching
is compared to the second column reporting the percentage of time spent on research, a clear inverse relationship exists. Those faculty in colleges and universities whose primary mission is undergraduate teaching spent relatively few hours engaged in research in comparison to faculty at research or doctoral institutions. Such is consistent with previous findings mentioned earlier.

Nevertheless, it is clear from the data in each institutional category that faculty within every single institutional category devoted the majority of their time to teaching duties. The faculty assumption that most faculty have intentionally abandoned their teaching responsibilities to pursue research can not be supported by the data in the tables cited above. (NCES has issued several reports on its 1988 NSOPF survey that give much more detailed tabulations and findings on faculty workload for the reader to consult. At this writing, data and reports for the 1992 NSOPF survey have yet to be released to the public.)

CLASSROOM CONTACT HOURS

NSOPF data reveal in Table 3 that on average faculty across all institutions devoted almost ten hours of their time teaching, ranging from approximately six hours of classroom time at research universities to over ten hours at comprehensive institutions. As might be expected, community college professors spent more than fifteen hours in the classroom. Surprisingly, faculty at private doctoral universities had the fewest student contact hours overall at 201, with public community colleges having by far the most at 427. Table 4 shows that faculty in the fine arts, humanities, and education tended to devote more hours to classroom activities, but faculty in the natural sciences had the highest level of student contact hours by program area.

FACULTY PRODUCTIVITY

The 1988 NSOPF study also contained the most comprehensive set of data to date on faculty productivity, as measured by publications. However, no determination about the actual quality of these publications was attempted in the study. Tables 5 and 6 provide data as of 1987 on the mean number of publications produced over two years for full-time faculty by institutional category.

Obviously, as Table 5 shows explicitly, faculty at research universities, followed by doctoral university faculty, publish articles and books much more frequently than faculty at other types of institutions. What is striking, however, is the involvement of all faculty in some form of productive activity such as presentations or other kinds of reports.

The same basic patterns are apparent, albeit in cumulative fashion in Table 6, which assesses productivity throughout a faculty member's career. Research and doctoral faculty publish more frequently, but all faculty are engaged in some form of productive activity.
Table 1
Mean Number of Hours Worked by Full-Time Regular Faculty by Type and Control of Institution: Fall 1897

<table>
<thead>
<tr>
<th>Type and Control of Institution</th>
<th>Total Hours Worked</th>
<th>Activities at this Institution</th>
<th>Other Paid Activities</th>
<th>Unpaid Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institution</td>
<td>53</td>
<td>46</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Public Research</td>
<td>57</td>
<td>52</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Private Research</td>
<td>56</td>
<td>50</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Public Doctoral</td>
<td>55</td>
<td>49</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Private Doctoral</td>
<td>53</td>
<td>46</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Public Comprehensive</td>
<td>52</td>
<td>46</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Private Comprehensive</td>
<td>51</td>
<td>44</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>52</td>
<td>47</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Public Two-Year</td>
<td>47</td>
<td>40</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>50</td>
<td>43</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: Details may not add to totals because of rounding.
<table>
<thead>
<tr>
<th>Type and Control of Institution</th>
<th>Teaching</th>
<th>Research</th>
<th>Admin.</th>
<th>Community Service</th>
<th>Other Work</th>
<th>Prof. Devel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institutions</td>
<td>56</td>
<td>16</td>
<td>13</td>
<td>4</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Public Research</td>
<td>43</td>
<td>29</td>
<td>14</td>
<td>3</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Private Research</td>
<td>40</td>
<td>30</td>
<td>14</td>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Public Doctoral</td>
<td>47</td>
<td>22</td>
<td>14</td>
<td>3</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Private Doctoral</td>
<td>39</td>
<td>27</td>
<td>13</td>
<td>2</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Public Comprehensive</td>
<td>62</td>
<td>11</td>
<td>13</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Private Comprehensive</td>
<td>62</td>
<td>9</td>
<td>14</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>65</td>
<td>8</td>
<td>14</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Public Two-Year</td>
<td>71</td>
<td>3</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>59</td>
<td>9</td>
<td>15</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Percentages may not add to 100 because of rounding.

<table>
<thead>
<tr>
<th>Type and Control of Institution</th>
<th>Classroom Hours</th>
<th>Student Contact Hours*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institutions</td>
<td>9.8</td>
<td>302</td>
</tr>
<tr>
<td>Public Research</td>
<td>6.6</td>
<td>259</td>
</tr>
<tr>
<td>Private Research</td>
<td>5.9</td>
<td>229</td>
</tr>
<tr>
<td>Public Doctoral</td>
<td>8.0</td>
<td>285</td>
</tr>
<tr>
<td>Private Doctoral</td>
<td>6.9</td>
<td>201</td>
</tr>
<tr>
<td>Public Comprehensive</td>
<td>10.5</td>
<td>319</td>
</tr>
<tr>
<td>Private Comprehensive</td>
<td>10.9</td>
<td>276</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>10.6</td>
<td>237</td>
</tr>
<tr>
<td>Public Two-Year</td>
<td>15.2</td>
<td>427</td>
</tr>
<tr>
<td>Other</td>
<td>9.5</td>
<td>329</td>
</tr>
</tbody>
</table>

* Number of hours per week spent teaching classes by the number of students in those classes.

### Table 4
Mean Number of Classroom Hours and Student Contact Hours of Full-Time Regular Faculty in Four-Year Institutions by Program Area: Fall 1987

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Classroom Hours</th>
<th>Student Contact Hours*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Program Areas in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four-Year Institutions</td>
<td>8.5</td>
<td>270</td>
</tr>
<tr>
<td>Agriculture/Home Economics</td>
<td>7.4</td>
<td>211</td>
</tr>
<tr>
<td>Business</td>
<td>8.6</td>
<td>310</td>
</tr>
<tr>
<td>Education</td>
<td>9.0</td>
<td>231</td>
</tr>
<tr>
<td>Engineering</td>
<td>8.3</td>
<td>259</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>11.4</td>
<td>267</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>7.3</td>
<td>251</td>
</tr>
<tr>
<td>Humanities</td>
<td>9.3</td>
<td>242</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>8.0</td>
<td>325</td>
</tr>
<tr>
<td>Social sciences</td>
<td>8.1</td>
<td>305</td>
</tr>
<tr>
<td>Other Fields</td>
<td>9.2</td>
<td>252</td>
</tr>
</tbody>
</table>

* Number of hours per week spent teaching classes by the number of students in those classes.

Table 1
Mean Number of Publications by Full-Time Regular Faculty During the Last Two Years, by Type of Publication and by Type and Control of Institution: Fall 1987

<table>
<thead>
<tr>
<th>Type and Control of Institution</th>
<th>Refereed Articles</th>
<th>Books, Chapters</th>
<th>Book Reviews</th>
<th>Other Reports</th>
<th>Presentations, Exhibitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institutions</td>
<td>2.0</td>
<td>0.6</td>
<td>0.6</td>
<td>1.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Public Research</td>
<td>4.0</td>
<td>1.2</td>
<td>0.7</td>
<td>2.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Private Research</td>
<td>4.1</td>
<td>1.4</td>
<td>0.8</td>
<td>1.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Public Doctoral</td>
<td>2.7</td>
<td>0.8</td>
<td>0.9</td>
<td>1.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Private Doctoral</td>
<td>3.6</td>
<td>0.9</td>
<td>0.8</td>
<td>1.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Public Comprehensive</td>
<td>1.0</td>
<td>0.4</td>
<td>0.5</td>
<td>1.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Private Comprehensive</td>
<td>1.0</td>
<td>0.4</td>
<td>0.5</td>
<td>1.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>0.6</td>
<td>0.3</td>
<td>0.4</td>
<td>0.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Public Two-Year</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Other</td>
<td>0.9</td>
<td>0.6</td>
<td>0.7</td>
<td>1.5</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table 6
Mean Number of Publications by Full-Time Regular Faculty During Their Career by Type of Publication and Type and Control of Institution: Fall 1987

<table>
<thead>
<tr>
<th>Type and Control of Institution</th>
<th>Refereed Articles</th>
<th>Books, Chapters</th>
<th>Book Reviews</th>
<th>Other Reports</th>
<th>Presentations, Exhibitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institutions</td>
<td>12.4</td>
<td>2.6</td>
<td>3.4</td>
<td>7.9</td>
<td>28.4</td>
</tr>
<tr>
<td>Public Research</td>
<td>24.9</td>
<td>4.8</td>
<td>4.8</td>
<td>13.0</td>
<td>38.1</td>
</tr>
<tr>
<td>Private Research</td>
<td>26.8</td>
<td>5.4</td>
<td>5.7</td>
<td>9.8</td>
<td>30.2</td>
</tr>
<tr>
<td>Public Doctoral</td>
<td>17.1</td>
<td>2.9</td>
<td>4.0</td>
<td>9.0</td>
<td>34.2</td>
</tr>
<tr>
<td>Private Doctoral</td>
<td>28.8</td>
<td>3.6</td>
<td>4.8</td>
<td>8.4</td>
<td>28.7</td>
</tr>
<tr>
<td>Public Comprehensive</td>
<td>6.2</td>
<td>1.6</td>
<td>3.1</td>
<td>7.2</td>
<td>31.1</td>
</tr>
<tr>
<td>Private Comprehensive</td>
<td>5.5</td>
<td>1.2</td>
<td>2.6</td>
<td>8.8</td>
<td>28.7</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>3.1</td>
<td>1.4</td>
<td>2.5</td>
<td>4.7</td>
<td>20.1</td>
</tr>
<tr>
<td>Public Two-Year</td>
<td>1.0</td>
<td>0.8</td>
<td>1.4</td>
<td>3.4</td>
<td>13.8</td>
</tr>
<tr>
<td>Other</td>
<td>5.1</td>
<td>2.5</td>
<td>4.4</td>
<td>6.7</td>
<td>41.1</td>
</tr>
</tbody>
</table>

In sum, empirical data from the NSOPF survey are consistent with findings elucidated in prior studies: Faculty workload and productivity vary by institutional type with research or doctoral faculty devoting greater proportions of their time to research as well as having less time spent in actual teaching than faculty at other colleges and universities.

Concerning faculty workload since NSOPF, data recently collected from a survey of over 35,000 full-time faculty at 392 colleges and universities in the United States conducted in 1989–1990 by the Higher Education Research Institute at UCLA, are likewise relevant. About 55% of the targeted sample actually responded to the survey. According to this research, approximately 85% of faculty who were surveyed spent from five to twenty hours of their time per week directly engaged in teaching activities. In addition, 77% of those faculty who responded devoted between five to twenty hours per week to class preparation. Moreover, 63% of respondents allocated less than eight hours of their time to scholarly research and writing. Tabulations also reveal that 87% of faculty respondents used eight hours or less of their time in advising students, 92% were active in committee work for eight hours or less, and 85% were involved in some type of administrative work. Once again, I surmise that local discrepancies would be a function of institutional type.

Altogether these figures give the portrait of a busy cadre of professionals who devote much of their time to teaching and related matters. Consequently, the role performance of academic women and men as a whole has not varied enough to justify the current rhetoric about faculty productivity. In short, faculty productivity does not appear to be a national problem. For another publication, I am presently involved in examining rather meticulously these issues as they pertain to individual state reports about faculty workload and productivity. My hunch is that unless powerful perturbations – at variance with the dominant empirical trends identified here – are manifest in various types of public institutions, the case against faculty is based more on hyperbole than rigorous evidence. The assertion that faculty have been derelict in their professional duties is bogus or spurious with few exceptions. Based on the research literature I have encountered or am familiar with, there is little inertia for wholesale changes in faculty workload and productivity demands emanating from within the confines of the academic professions. Indeed, the AAUP warns all regular, full-time faculty about the growing encroachment of part-time faculty within employment ranks in higher education (AAUP 1992).

WORKLOAD AND PRODUCTIVITY ISSUES: POLICY IMPLICATIONS

Another vital source of data on faculty workload and productivity concerns gives an influential administrative view of issues related to academic work. Several recent reports issued jointly by the State Higher Educational Executive Offices (SHEEO) and the Education Commission of the States, have concentrated on topics related to faculty workload (Russell, November 1992; Heydinger and Simsek, November 1992;
Jordan and Layzell, November 1992). The organization, SHEEO, is in the vanguard of shaping state policies in higher education that deal with faculty workloads and productivity concerns, especially as these relate to budget initiatives and funding allocations made by state legislators on the advice of state higher education boards. I will briefly glean the most salient aspects of these accounts. Both organizations assume that, as a result of powerful historical, institutional, and social forces, the modern faculty role is currently undergoing a fundamental transformation away from the hegemony of the research model (Heydinger and Simsek 1992, pp. 1-15).

The focus and interests of both organizations are mainly on public higher education. The opening remarks of one report indicates what is at stake and reads: "There is a very simple observation that comes from examining budgets of public higher education institutions: the largest component of the budget is in personnel expenditures, and faculty comprise the largest portion of total personnel expenditures." (Jordan and Layzell 1992, p. 1). [A recent article by Cogan (1993) disputes this claim with substantive empirical data.] Later in the report, they observe, "The fundamental issue behind the current concern with faculty teaching loads and faculty workloads is accountability" (Jordan and Layzell 1992, p. 2). Massy (1990) gives justification for this viewpoint in his research on the dynamics of academic productivity, since he ties some of the escalating costs of higher education to faculty needs and prerogatives. The former include salary increases (p. 7), while the latter embody curricular and personnel matters. Predictably, Massy recommends cost-saving initiatives that place priority on the welfare of institutions rather than faculty concerns; there is no collaboration or coordination suggested with faculty professional associations or other interested bodies in the report. In yet another report, Mingle (1991) chronicles how these concerns and the agenda implied by them are reflected in state policies.

The SHEEO studies portent increased scrutiny of faculty workload and productivity, using standardized measures and/or norms of some kind. Altogether, these reports chronicle a movement away from teaching and toward research in public universities within state systems of higher education studied, especially Virginia and Arizona (Jordan and Layzell 1992, pp. 6-9). To forestall legislative interventions which might conceivably mandate the requirements of faculty work, they suggest a preemptive strike of self-regulation aimed at moderating faculty proclivities toward engaging in research. Basically, their empirical findings do not deviate substantially from those cited earlier in this paper (p. 8). Their data show clearly that faculty at public comprehensive institutions have heavier teaching loads than those at research or doctoral universities. Once again, institutional type dictates faculty workload and productivity.

In a separate report, SHEEO incorporates the latest findings from several of the major available studies about faculty workload as well as survey data indicating faculty desires across all types of institutions to spend more time in teaching (Russell 1992, pp. 5-12). Based upon these and other
types of evidence, SHEEO advocates an agenda for re-shaping the faculty role towards more teaching and institutional responsibilities (Heydinger and Simsek 1992, pp. 21-26). A key prerequisite to fulfilling this agenda is collecting data on faculty workloads across institutions and systems. At this writing, SHEEO is in the process of coordinating or assembling research aimed at measuring various dimensions of academic work.

It seems that the real agenda of the current controversy over faculty workload and productivity is captured by SHEEO rather innocuously in one report: "While there may be no mass of empirical evidence regarding declining teaching loads, policymakers' perceptions are not completely unwarranted, and a failure of governing and coordinating boards to act may well result in legislative intervention." (p. 18). If the preponderence of evidence on faculty workload and productivity is being denied or dismissed, on what basis are policy decisions being made - whim, fantasy, caprice, perceptions, costs or politics? We do not need failure in higher education that is commensurate with the political failure or administrative shortsightedness that have hampered this nation for decades. What is at stake, in my opinion, is a power struggle over how faculty will respond to the cost pressures endemic to the economic crisis in higher education. Many of the problems in higher education have more to do with the malpractice of legislative actions and public policies than decreases in faculty productivity.

CONCLUSION

Faculty are very busy professionals across all types of institutions. Several sources of evidence tabulated above reveal this fact. On average, college and university faculty collectively place great priority on teaching duties; they also engage in research and service activities in direct relation to the educational mission defined by their employing institutions. There is no evidence that the workload pressures for most faculty will subside soon, even as demographic changes take place in the academic profession as a whole.

Acute fiscal pressures are giving impetus to an administrative or managerial movement designed to foster greater accountability and productivity from faculty members. Across all types of institutions, increased attention is being paid to how faculty allocate their time and set priorities in their workload. The trend is towards adopting institutionally-adjusted measures of faculty accountability and productivity such as teaching and service, rather than relying disproportionately on faculty research productivity as the predominant indicator of success.

Many influential benefactors as well as constituents of higher education are now more closely scrutinizing various features of academic work in the decade of the 1990's. Some legislators and members of the public look askance at the academic career. In this climate of skepticism, faculty are expected to do even more than before in the name of teaching
undergraduates and addressing localized, institutional concerns. Unfortunately, the escalating momentum - sponsoring much of the process and many of the procedures involved in the evaluation of faculty workload and productivity - seems to be occurring outside the control or direct participation of most professors. Whereas most of the potent polemics presented immediately above are related specifically to the public sector, it is unlikely that faculty at private sector institutions will escape the effects of these pressures in the near future. College and university faculty need a systematic, coordinated response to these pressures aimed at transforming their careers. Let me share with you a few of my thoughts on how this might actually transpire.

One direction which might be aggressively pursued in the remainder of this decade is for the plethora of faculty professional associations or unions to assemble together: (1) to formulate organizational entities as well as strategies to enhance productivity; (2) to coordinate their efforts and resources in establishing their own think tank - akin to the Rand Corporation - to sponsor ongoing basic research on the academic system, investigations which are not shaped by the urgent, often applied interests of academic administrators or political constituencies; and (3) to determine the effects of various resource inputs and transformations upon the outcomes of academic work. None of these activities should be controlled or financed by hegemonic interests - whether individual or corporate - formally or informally. A modicum of social organization across disciplines, unions, institutions and departments is likely to breed synergistic power that disaggregated individuals rarely cultivate. Qualitatively, we need a substantive planning effort and execution for this endeavor which exceeds that given to the Manhattan Project or the space program of past eras. In an era of debt, skepticism, cynicism and pettiness, we need not be afraid of the magnitude of this task. The best intellectual frontiers have yet to be explored.

Faculty must reshape the academic division of labor in such a way as to provide the most rigorous expertise on the career and social context that engulfs their work collectively. It may well be true that a divided house, even in higher education, can not stand. Faculty must carefully, yet strategically, engage the impending technological and social forces - including politics, ignorance or economics - which threaten their work. I do not want to be alarmist, but we academics need to remind ourselves that obsolescence can be the outcome of social as well as technological process. We must be careful not to go the way of the dinosaur! We can no longer afford to bury our collective head like an ostrich while the mistakes or constraints of administrators and politicians inhibit our potential. Academic freedom has practical implications beyond one's laboratory or classroom.

Secondly, theoretical and methodological concerns must become central to the study of higher education if we are to move beyond a facile understanding of academic work. Conceivably, there is much relevant knowledge in the social sciences which could be utilized to monitor and evaluate faculty productivity more rigorously. Models depicting the
effects of diffusion, adaptation and exchanges are salient. Insights from organizational theory and decision analysis are especially pertinent. One might query: How does the organizational ecology as well as social networks of a particular college or university affect the productivity of faculty with a particular set of professional characteristics, net his/her own motivation and decisions? Here, faculty productivity would not be assessed under the rubric of methodological individualism germane to survey research. Local administrative uses mask too many unknowns about the optimal levels faculty productivity.

My own research sentiments lay in trying to ascertain via sophisticated mathematical modeling and computer simulations precisely what impact certain policies would have upon various components of the academic system if adopted under various scenarios.

In short, the question is: What will happen to one aspect of higher education if the structure, dynamics or processes endemic to another sector or component were manipulated or changed in a specific way?

My perspective entails regarding higher education as a system amenable to diachronic analysis across the dimensions of space and time (Blalock et al., 1975). We must ultimately discover exactly how the production, legitimation, and diffusion of knowledge in academic systems can be affected by policy changes in the economic, political and ideological spheres. I am quite wary of large-scale policy changes in the absence of this rigorous form of knowledge.

Finally, faculty must be more astute than ever before about the economics and politics of higher education — outside our specialized fields of expertise. Seldom do faculty in their respective disciplines think about the welfare of the academic profession as a whole. Our professional associations need, therefore, to set new priorities. Minimizing time demands and maximizing the efficient flow of information, we must collaborate outside the boundaries of our academic departments or campuses. We need, in consultation with others, to advocate that state and federal governments develop and publish a comprehensive higher education policy for the decades ahead. We need to insist that a range of scenarios be considered that will incorporate the best social scientific research and data available. State and national commissions can be organized to issue periodic reports throughout each decade.

Moreover, faculty must expose the hidden agenda of increasing faculty workloads without a corresponding increase in compensation. Faculty salaries have not kept pace with the cost of living across the last two decades, relative to the other educated professions (Bowen and Schuster, 1986). In effect, we have already been getting less for greater productivity. If more work is pending or more students need to be taught more effectively, then our compensation and other forms of remuneration must increase as well. We must also estimate the effects of manipulating faculty workload on the quality or outcomes of higher education. We can no longer
afford to tolerate ineptitude in either public policies or administrative practices if we are to thrive in the years ahead. Basing faculty productivity is not a panacea for the systemic problems affecting higher education. As the twentieth century closes, we desperately need once again to seek a "new frontier" in the conceptualization, planning, and execution of higher education. To do so would require enhanced trust and collegiality among all the various actors implicated (Bess, 1989).

BIBLIOGRAPHY


YET ANOTHER LOOK AT FACULTY PRODUCTIVITY

B. WHAT AGAIN?
PRODUCTIVITY ISSUES IN HIGHER EDUCATION TODAY

Gordon K. Davies, Director
State Council of Higher Education for Virginia

In a recent speech, a colleague of mine warned that "we are on a collision course with demography -- in the states, across the nation, and around the world." She meant that more and different kinds of people are seeking higher education, and that we shall be hard-pressed to avoid diminishing the quality of the services we offer as a result.

We are on a collision course because demand for higher education is increasing while our states are experiencing enormous financial problems. Revenues increase sluggishly, mandatory expenditures for Medicaid and prisons consume ever greater portions of revenues, and the specter of defense conversion looms as a threat to further growth. Given our common understanding of "quality," measured by the resources a college or university commits to its programs, we cannot help but crash, with great loss of dignity, if not of life.

This is how events are playing out in Virginia, whose system of 39 public colleges and universities enrolls about 300,000 students. Since 1990, we have taken frightful budget cuts -- about $413 million or 22 percent of the state tax dollars appropriated to higher education. We have replaced almost all of the lost general fund revenues with tuition and fees -- a massive cost-shifting from the state to the consumer -- and have tried to protect access by increasing financial aid.

It will not get better soon. The recession seems to be over and revenues are increasing at a good rate, but Medicaid and prisons -- twin demons of the night -- are eating our lunch. There is little or no new money for higher education; little or no prospect of restoration. Also, we expect 65,000 more students to seek admission by the year 2002.

Not surprisingly, the question came up: Are faculty working hard enough? We answered that there was not doubt that faculty worked hard. Of course they do but, we added, there is a reason to question what faculty work hard at.
Faced with the prospect of 20 percent enrollment growth and little, if any, additional money, we were asked to suggest ways in which Virginia's colleges and universities could increase productivity. This we have done, to less than universal acclaim.

Virginia is not alone among the states. A 1992 survey indicated that substantially over half the state boards either have workload policies in place or under study. This is an issue primarily because of budget problems, as most states are preoccupied with the factors I have already identified: Less money and more demand.

I think it fair to say that most of my colleagues are not hostile to faculty. Most of us are uncomfortable to find ourselves in bed with critics who make their living by bashing faculty. Ishmael was surely more at ease with Queequeg than we are with those who caricature faculty as "lazy, liberal, leftist and, yes, licentious."

Ishmael made a friend who unintentionally saved his life. We know there is no salvation in our making friends with the faculty bashers. We also know that faculty responsibilities differ enormously from the research-intensive university to the community college. In our research-intensive universities, teaching responsibilities average less than six hours; in our community colleges, they now approach eighteen. Clearly, we cannot generalize about the faculty.

Depending in part upon how higher education responds, some states will do the wrong thing: They will join the relatively small number that legislate teaching loads. The California State University System, for instance, faces huge discrepancies between state revenues and expenditures, rapidly rising tuition, and enrollment-demand projections of up to 700,000 new students, including a wide variety of racial and ethnic minorities. Its initial response was to cut enrollment by 20,000 and resist a faculty union demand for a workload reduction from twelve to nine hours. The California ship is very close to hitting the rocks.

Legislatively-mandated teaching loads are wrong, not just because they do not work but, because they distract us from the real challenges. I repeat: Faculty work hard; our task is to question the definition of faculty work. We will get only marginal gains in productivity by legislating teaching loads. We need, instead, to measure productivity in a new way: Learning as a function of cost. We need to define "work" differently than we do today.

We might think of the reactions to budget cuts as going through four stages, not in a strictly linear manner, of course, but with a general pattern of progression.

First, institutions apply cuts across-the-board, squeezing discretionary spending. The implicit assumption is that the pain is only temporary, and that business as usual will resume shortly.
The second stage is triage: Eliminating the weakest programs or services; sometimes simply those with the weakest constituencies. The assumption here is still that the reductions are short-term and that the institution can continue to behave pretty much as it always has.

The third stage is to improve the productivity of the current ways in which colleges and universities deliver services, primarily teaching and research. This is where some of us are now, and, in itself, it will not be enough.

For one thing, we have ratcheted productivity up markedly in the past decade. For another, we have wrung most of the fat out of most of the system. Our enrollment has increased 27 percent while staffing has increased only eight percent. Most of the increases in productivity have come in the non-research universities and, to be brutally frank, most have been achieved without regard for student needs. There is some evidence that we have increased teaching, but there is none that we have increased learning.

What we suggested in Virginia is that institutions shift priorities slightly to accommodate enrollment growth through 1996. Specifically, we said that departmental research -- that is, research the state pays for with general fund and tuition revenue -- should be planned, peer-reviewed, and its results evaluated. If that were done (and has not been done heretofore) some fifteen percent of over $200 million could be shifted to teaching. Obviously, most of this shift would be at the research-intensive universities.

But, there is a limit to the usefulness of this approach. We want state-supported departmental research. We want faculty at research-intensive universities to have research programs. We want community college faculty to teach less, not more.

And so we come to the fourth stage of budget-cutting, the fourth kind of reaction. Here we have to be careful not to get lost in the jargon of "Re's": Restructure, Reconceive, Re-engineer and - most ubiquitous - Re-invent. But we are talking about doing our work in entirely new ways: Teaching differently, allocating faculty time differently, and taking advantage of modern technology.

We are talking about productivity as "learning divided by cost." Who cares about seat time or podium time? About credit hours taught or endured?

Every institution in the technologically advanced world is changing, usually under great pressure. Every learned profession in our society is changing both the terms and conditions of its work and the nature of that work itself. Neither colleges and universities, nor faculties as learned professionals, can be exempt from the global forces that are churning our lives.
The Wall Street Journal recently reported on major and traumatic change within the Nissan Corporation. The President of Nissan, Yoshifumi Tsuji, was reported as saying, "A bloodless change isn't going to do us any good."

So it is for us. The choices are wrenching change or decline into poverty -- genteel poverty for a few privileged institutions and abject poverty for the substantial majority.

Lines from an Adrienne Rich poem are in my mind:

Whatever we do is pure invention
The maps they gave us were out of date
by years - The way is not clear,
the next steps are not obvious.
But we must act nonetheless.
YET ANOTHER LOOK AT FACULTY PRODUCTIVITY

C. EQUITY IN THE ACADEMIC WORKPLACE:
THE RELATIVE VALUE OF TEACHING AND RESEARCH

Professor James S. Fairweather
Center for the Study of Higher Education
Penn State University

Two theories of organizational behavior offer competing explanations for how American colleges and universities reward their faculty. The first emphasizes the diversity of institutional missions and reward structures. Each type of institution, whether liberal arts colleges offering in-depth experiences for undergraduates, or major universities generating research and training graduate students, has its own niche, purpose and clientele (Clark, 1983). The Carnegie Foundation for the Advancement of Teaching (1987) has codified this diversity in four-year institutions by stressing distinctions in mission: 1. Research universities, whose faculty train the majority of doctorates in the United States and which house most of the funded research; 2. doctoral-granting universities, whose faculty also train doctoral students and conduct research, but whose production of doctorates and research dollars generated are less than found in research universities; 3. comprehensive colleges and universities, which focus on liberal arts and professional programs at the undergraduate and masters-degree levels; 4. liberal arts colleges, which focus primarily on undergraduates; and 5. other four-year institutions, the most prevalent of which are independent engineering and medical schools.

Although each type of institution shares a common function -- teaching. The unique missions create a segmented market (Garvin, 1980, pp. 7-8) where institutions from different segments select and reward faculty differentially through compensation and other forms of reward (Breneman and Youn, 1988; Long, 1978; Smelser and Content, 1980; Youn and Zelterman, 1988). Within each type of institution, Youn and Zelterman (1988, p. 67) argue that faculty rewards, particularly salaries, also vary by discipline, each of which may emphasize activities of different value to an institution. For example, faculty in one discipline may bring in the most grant money, whereas faculty in another field may teach more students; these activities may be valued and rewarded differently by academic institutions with distinct missions.
According to the segmented market viewpoint, which I call Perspective 1, faculty pay should follow institutional mission and market segmentation. The rewards for specific faculty behaviors should vary by type of institution. As an example, given their different missions, the reward for research productivity should be greater for faculty in research universities than for faculty in liberal arts colleges.

Most studies of faculty pay have adopted Perspective 1, focusing on external markets. Topics studied include faculty salaries and inflation (American Association of University Professors, 1989; College and University Personnel Association, 1986a, 1986b; Hansen, 1985), comparative analyses between the professorate and other professions (Dillon and Marsh, 1981), the effect of pay on faculty mobility (Ehrenberg, Kasper, and Rees, 1991), and discrimination by ethnicity and gender (Daymont and Andrisani, 1984; Gordon and Morton, 1974).

In contrast, Levin (1991) claims that salaries and other forms of faculty reward are a form of incentive, based on internal norms and values rather than simply a function of market demands. Sociologists agree, claiming that the pursuit of prestige, particularly through research and publishing, is a response to internal mores. Institutions seeking to enhance prestige will mimic those with the highest status (Fulton and Trow, 1974; Jencks and Reisman, 1968). Perspective 2, then, sees pay primarily as a function of internal norms which are dominated by the pursuit of prestige across type of four-year institution. Fulton and Trow (1974) describe this phenomenon as "institutional drift," where the high value of research incorporated by prestigious institutions is adopted by those with lesser social standing. If Perspective 2 is correct, then research productivity should be valued highly by academic institutions regardless of mission and market segment.

Although surveys of faculty attitudes about the role of research in promotion and tenure (e.g., Carnegie, 1989) support Perspective 2, surprisingly little research exists about its utility in explaining faculty salaries. The few studies consistent with Levin's view of pay as incentive are inconclusive. Although research activity has been consistently found to be positively related to pay (Fulton and Trow, 1974; Kasten, 1984; Siegfried and White, 1973; Tuckman and Hagemann, 1976), the relationship between pay and teaching, which is crucial to understanding the correspondence between faculty pay and institutional mission, is ambiguous. Teaching has been found positively related to faculty pay (Hoyt, 1974; Salthouse, McKeachie, and Lin, 1978; Siegfried and White, 1973), unrelated to pay (Tuckman and Hagemann, 1976), and negatively related to pay (Marsh and Dillon, 1980). In addition, little research on faculty pay as incentive has been done with national data, instead focusing on one or at most a handful of institutions.

I. DATA and METHODS

To test the two competing perspectives on faculty pay, data were gathered from the 1987-88 National Survey of Post-Secondary Faculty (NSOFF). The survey examined a nationally
representative sample of 11,071 faculty from 480 colleges and
universities, stratified by Carnegie type (Carnegie, 1987),
source of control (public/private), and size (estimated number
of faculty). Some 8,383 full and part-time faculty from 424
institutions responded, a faculty response rate of 76 percent
(Russell et al., 1990, pp. 97-98.) For this paper, analyses
were carried out for full-time, tenure-track faculty from
four-year institutions (n = 4,481; weighted n = 343,343).

II. STUDY VARIABLES

The principal measure of compensation used in this study
was basic salary from the institution. In studying faculty
salary, human capital theory predicts that experience,
seniority, education level, and discipline or program area are
indicative of productivity, and hence, related to faculty pay
(Moore, 1993; Parcel and Mueller, 1983). Studies of faculty
pay have found various measures of human capital significant,
including discipline (Blau 1973; Fulton and Trow 1974; Gordon
and Morton 1974; Hansen 1985; Stark, Lowther, and Haggerty
1986), gender (Daymont and Andrisani 1984; Gordon and Morton
1974), and ethnicity (Gordon and Morton 1974). For this
study, human capital measures included age (during Fall term
1987), gender, ethnic/racial minority status (i.e., minority
defined as Hispanic, American Indian, Asian/Pacific Islander,
or African-American); highest degree awarded, time in current
rank (i.e., the number of years since achieving the rank held
at the institution in question during Fall term 1989); the
number of years at the current institution, and program area
(agriculture/home economics; business; education; engineering;
fine arts; health sciences; humanities; natural sciences;
social sciences, and other fields). An additional variable,
high paying field, was derived from ranking the average
pay in each program relative to the overall national average.

Besides measures of human capital, previous research on
faculty rewards has found direct measures of faculty activity,
workload and productivity useful (Blackburn and Lingenfelter,
1973; Brown, 1967; Clark, Harnett, and Baird, 1976; Conrad and
Blackburn, 1986; Fairweather and Brown, 1991). The categories
of faculty work, according to Bowen and Schuster (1986, p.
15), include teaching and instruction, research and
scholarship, public service, and institutional governance and
operation (i.e., administration). Measures of instruction-
related activities, workload, and productivity included
percent of time spent on teaching and instruction (including
time spent on working with student organizations; teaching,
advising and supervising students; grading papers; preparing
courses, and developing new curricula), hours spent in the
class room per week; the type of student taught
(undergraduate, graduate or both), and, total student contact
hours generated during Fall term, 1987 (estimated by the sum
across all courses taught in Fall term 1987 of the number of
hours a class met per week times the number of students
enrolled in the class.)

Three measures of research and scholarship were used:
Percent of time spent on research and scholarship (including
time spent conducting research, preparing or reviewing
articles or books, and attending or preparing to attend professional meetings or conferences; giving performances in the fine or applied arts, and seeking outside funding for research; total refereed publications during the career (including the number of refereed articles, chapters in edited volumes, textbooks, other books, monographs, and reviews of books, articles, or creative works), and whether or not the respondent was a principal investigator (or co-principal investigator) on an externally-funded research project during Fall term 1987. Finally, estimates of the percent of time spent on administrative activities and on public or community service were added. 2

III. SCALES

High positive correlations between age, time in rank, and years at current institution ($r = .65$ to $.69$), and a high negative correlation between percent of time spent on teaching and research ($r = -.62$), suggested the need to create composites prior to proceedings with multivariate analyses. A principal components analysis with an oblique rotation was used to create two composites. The first, seniority, combined age, time in rank, and years at the current institution into a single scale. The second was derived from the finding that time spent on research and on teaching are inseparable — the more faculty spend on one activity, the less they spend on the other. The second composite — more research/less teaching — reflected this "exchange" relationship.

IV. RESULTS

Means and standard deviations for study variables are shown in Table One. 3 Intercorrelations between composite variables and faculty pay are shown in Table Two. Regression models using ordinary least squares (OLS) were used to examine the relationships between human capital measures, faculty activity and faculty productivity with pay. 4

If Proposition 1 is supported, then the behavioral predictors of pay should differ by type of institution according to distinct missions. If Proposition 2 is supported and institutions follow a common internal norm to enhance prestige, then the behavioral predictors of pay may transcend institutional type and program area.

The results are presented separately by type of institution and program area. The variance accounted for ranged from .38 to .47 for type of institution, and between .39 and .58 by program area.

A. Type of Institution

Results of the regression analyses are shown in Table Three. A summary of these findings by variable category is discussed below.
<table>
<thead>
<tr>
<th>Table One</th>
<th>Mean</th>
<th>SD</th>
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<tr>
<td><strong>Income</strong></td>
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<tr>
<td>Basic Income from Institution</td>
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<td>18,845</td>
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<td>High Paying Field*</td>
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<td>Age (years)</td>
<td>47.8</td>
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<tr>
<td>Percent Minority</td>
<td>10.4</td>
<td>30.6</td>
<td>.5</td>
</tr>
<tr>
<td>Percent Male</td>
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<td>40.6</td>
<td>.60</td>
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<td><strong>Job History</strong></td>
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<td>Time in Rank (years)</td>
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<td>6.4</td>
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<tr>
<td>Percent with Highest Degree Doctorate</td>
<td>82.2</td>
<td>38.3</td>
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<tr>
<td>Years in Current Position</td>
<td>12.4</td>
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<td>Percent of Time Spent Teaching</td>
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<td>Student Contact Hours (semester)</td>
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<td>Numbers of Hours per Week</td>
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<td>Teaching in Class</td>
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<tr>
<td>Percent who Taught only Undergraduate Students</td>
<td>8.4</td>
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<td>Percent who Taught only Graduate Students</td>
<td>11.7</td>
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<td>Percent who Taught both Undergraduates and Graduates</td>
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<td>Percent of Time Spent on Research/Scholarship</td>
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<td>Total Number of Publications during Career</td>
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<td>Percent who were Principal Investigators on an Externally-funded Project</td>
<td>24.7</td>
<td>43.1</td>
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<td><strong>Other</strong></td>
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<tr>
<td>Percent of Time Spent on Administrative Activities</td>
<td>14.0</td>
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<td>Percent of Time Spent on Community/Public service</td>
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<td>Percent of Time Spent on Consulting</td>
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<tr>
<td>Percent of Time Spent on Professional Development</td>
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<td>7.4</td>
<td>.11</td>
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* -1 = below average, 0 = average, 1 = above average

Source: NSOPF 1988

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Table Two

CORRELATION MATRIX, COMPOSITE VARIABLES:
ALL FULL-TIME, TENURE-TRACK FACULTY

<table>
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<tr>
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<th>1</th>
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<td>.25</td>
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<td>-.02</td>
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<td>.05</td>
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<td>.28</td>
<td>.25</td>
<td>-.05</td>
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<td>3. Seniority</td>
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<td>.00</td>
<td>-.02</td>
<td>.02</td>
<td>-.01</td>
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<td>-.12</td>
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<td>-.08</td>
<td>.04</td>
<td>.04</td>
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<td>4. Minority Faculty Member</td>
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<td>.01</td>
<td>-.03</td>
<td>.02</td>
<td>.01</td>
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<td>5. Male</td>
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<td>6. Highest Degree Doctorate</td>
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<td>.03</td>
<td>.15</td>
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</tr>
<tr>
<td># Publications, Career</td>
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<td>4947.1****</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
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<td>(430.5)</td>
<td>(1231.2)</td>
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<tr>
<td>Principal Investigator</td>
<td>290.2</td>
<td>127.8**</td>
<td>.01</td>
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<td></td>
<td>(361.3)</td>
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</tr>
<tr>
<td>% Time, Administration</td>
<td>2416.3****</td>
<td>524.2</td>
<td>.05</td>
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<td></td>
<td>(279.9)</td>
<td>(512.0)</td>
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</tr>
<tr>
<td>% Time, Service</td>
<td>-15.9</td>
<td>-717.6</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(248.0)</td>
<td>(542.4)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Paying Field</td>
<td>3687.1****</td>
<td>1283.3</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(371.2)</td>
<td>(767.8)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-square</td>
<td>.47</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>F</td>
<td>91.78****</td>
<td>21.73****</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Unweighted N</td>
<td>1491</td>
<td>367</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Table Three (cont.)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$b$</th>
<th>Standardized $b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>50002.2*** (2701.6)</td>
<td></td>
</tr>
<tr>
<td>Senority</td>
<td>-850.3 (-2617.4)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5865.7 (3049.8)</td>
<td></td>
</tr>
<tr>
<td>Ethnic/Racial Minority</td>
<td>696.9 (2553.0)</td>
<td></td>
</tr>
<tr>
<td>Highest Degree -- Doctorate</td>
<td>3274.3 (2796.8)</td>
<td></td>
</tr>
<tr>
<td>More Research/Less Teaching</td>
<td>1268.4 (2450.7)</td>
<td></td>
</tr>
<tr>
<td>Hours in Class/Week</td>
<td>-1168.0 (2588.7)</td>
<td></td>
</tr>
<tr>
<td>Student Contact Hours</td>
<td>-766.0 (1998.5)</td>
<td></td>
</tr>
<tr>
<td>Taught only Undergrads</td>
<td>-441.9 (3107.7)</td>
<td></td>
</tr>
<tr>
<td>Taught only Graduate Students</td>
<td>-4764.0** (1780.3)</td>
<td></td>
</tr>
<tr>
<td># Publications, Career</td>
<td>5389.0* (2175.9)</td>
<td></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>6319.9* (2560.8)</td>
<td></td>
</tr>
<tr>
<td>% Time, Administration</td>
<td>10670.0*** (2968.8)</td>
<td></td>
</tr>
<tr>
<td>% Time, Service</td>
<td>-2533.2 (2291.1)</td>
<td></td>
</tr>
<tr>
<td>High Paying Field</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td>R-square</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>5.09****</td>
<td></td>
</tr>
<tr>
<td>Unweighted N</td>
<td>115</td>
<td></td>
</tr>
</tbody>
</table>

NA = Not applicable.

**** = $p < .0001$, *** = $p < .001$, ** = $p < .01$, * = $p < .05$.

Source: NSOPF 1988
B. Human Capital

Seniority and gender (i.e., male) are strongly, positively related to pay in four of the five types of institutions. Holding the doctorate is positively related to pay in three of five types of schools. Ethnicity is positively related to pay for faculty in comprehensive colleges and universities but, is not related to pay in the rest.

C. Teaching

Only one teaching-related indicator is strongly, positively related to pay in all institutions: Teaching only graduate students (the indicator is not relevant for liberal arts colleges). The relationship between hours spent in class and pay is slight and positive for faculty in research-oriented institutions (research and doctoral-granting), and negative for faculty in liberal arts colleges! Student contact hours are related to pay only in liberal arts colleges (small, positive relationship).

D. Research/Scholarship

Publishing is the most consistent predictor of pay; it is strongly, positively related to pay at each type of institution. Faculty who spend more time on research and less on teaching receive higher salaries in four of the five types of colleges and universities. Being a principal investigator on a funded research project is positively related to pay at doctoral-granting and other four-year schools.

E. Administration and Service

Time spent on administration is strongly, positively related to pay at four of the five types of institutions. Time spent on service is unrelated to pay.

V. PROGRAM AREA

To examine faculty rewards across disciplines, regression analyses were repeated by type of academic program. A dichotomous measure indicating type of institution (doctoral or not) was included in the models tested. The results are summarized in Table Four.

A. Type of Institution

With the exception of other fields, where faculty in doctoral institutions receive higher pay than their peers in non-doctoral schools, the predictors of pay for each program area do not vary by type of institution.

B. Human Capital

Seniority is strongly, positively related to pay in eight fields and, weakly, positively related to pay in a ninth. Holding the doctorate is positively related to pay in seven of ten program areas, gender (i.e., male) is positively
Table Four
OLS ESTIMATES OF BASIC SALARY, BY PROGRAM AREA: SUMMARY TABLE

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Doctoral-granting Institution</th>
<th>Seniority</th>
<th>Male</th>
<th>Minority</th>
<th>Highest Degree--Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td>+++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td></td>
<td>+++</td>
<td></td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Health Sciences</td>
<td></td>
<td>+</td>
<td></td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>+++</td>
<td></td>
<td>++</td>
<td>+++</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td></td>
<td>+++</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td>+++</td>
<td></td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Other Fields</td>
<td></td>
<td>+++</td>
<td></td>
<td>+++</td>
<td>++</td>
</tr>
</tbody>
</table>

126
Table Four (cont.)

<table>
<thead>
<tr>
<th>Other</th>
<th>Percent Time, Administration</th>
<th>Percent Time, Public Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td>Health Sciences</td>
<td>+****</td>
<td>+****</td>
</tr>
<tr>
<td>Humanities</td>
<td>+****</td>
<td>----</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>+****</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>+****</td>
<td></td>
</tr>
<tr>
<td>Other Fields</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+++ = Significant positive relationship with basic salary (p < .0001).
+++ = Significant positive relationship with basic salary (p < .001).
++ = Significant positive relationship with basic salary (p < .01).
+ = Significant positive relationship with basic salary (p < .05).
---- = Significant negative relationship with basic salary (p < .0001).
--- = Significant negative relationship with basic salary (p < .001).
-- = Significant negative relationship with basic salary (p < .01).
- = Significant negative relationship with basic salary (p < .01).
Source: NSOPF 1988
Table Four (cont.)

**Teaching**

<table>
<thead>
<tr>
<th>Class Hours/Week</th>
<th>Student Contact Hours/Semester</th>
<th>Taught only Graduate Students</th>
<th>Taught only Graduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/ Home Economics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>--</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Health Sciences</td>
<td></td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>----</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Fields</td>
<td>-</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

128
Table Four (cont.)

<table>
<thead>
<tr>
<th>Research</th>
<th>More Research/ Less Teaching</th>
<th>Publications (career)</th>
<th>Principal Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td>+</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>+++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>+++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Fine Arts</td>
<td></td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Health Sciences</td>
<td></td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Other Fields</td>
<td>+</td>
<td>+++</td>
<td></td>
</tr>
</tbody>
</table>
related to pay in five. Ethnicity is weakly, positively related to pay in two fields (education and fine arts).

C. Teaching

As for type of institution, only one teaching-related indicator is strongly, positively related to pay: Teaching only graduate students (five out of ten program areas). Hours in class per week is significantly related to pay in only three of ten fields, and the relationship is negative. In the same three program areas, student contact hours generated is positively related to pay. Teaching only undergraduates is weakly, positively related to pay in one field (Other).

D. Research/Scholarship

As for type of institution, publishing is the most consistent predictor of pay; it is strongly, positively related to pay in each type of program. Faculty who spend more time on research and less on teaching receive higher salaries in five program areas. Being a principal investigator on a funded research project is also positively related to pay in five program areas.

E. Administrative and Service

Time spent on administration is strongly, positively related to pay in seven out of ten program areas. Time spent on service is unrelated to pay in nine fields, negatively related to pay in the humanities.

VI. DISCUSSION

The results do not support Perspective 1, which claims that predictors of pay should vary according to differences in institutional mission. Despite clear differences in professed mission, research and scholarship, and where applicable graduate instruction, are paramount at all types of institutions. Measures of teaching effort are modestly related to pay, if at all; the two types of institutions where hours spent in class is weakly, positively related to pay are institutions recognized for their research and scholarship rather than their teaching missions. In liberal arts colleges, with a purported focus on undergraduate education, time spent in the classroom is negatively related to pay.

The strongest predictors of pay are also remarkably consistent across program area. Indicators of research activity and graduate program emphasis are positively related to salary in most program areas. In contrast, teaching-related activities typically are either unrelated to salary or negatively related to it. Although student contact hours generated per semester is positively related to salary in three fields, in each case hours spent in class is negatively related to income. This finding suggests that fewer hours in class spent teaching larger numbers of students is positively related to income in three fields of study, which is not consistent with high quality instruction (McKeachie, 1986).
Whether by type of institution or program area, these results are more consistent with Perspective 2, which holds that pay is a reflection of internal norms, especially the pursuit of prestige through research and scholarship. The prevalence of seniority as a positive indicator of pay across type of institution and program area and the importance of gender suggest that Perspective 2 should be modified to take into account the importance of human capital measures in pay.

These results strongly suggest that the diversity of academic missions is not reflected in faculty rewards. Academic institutions and the programs within them have adopted a faculty reward structure dependent on greater involvement in research and publishing, and less involvement in teaching. Academic administrators who continue to believe that salaries reflect and enhance the unique missions of their institutions should re-examine their policies; the pursuit of a single value, prestige, rather than enhancing unique institutional missions, has become the norm for American higher education.

ENDNOTES

1. High paying field was scored as follows: 1 = program areas with average salaries above the overall mean (engineering and health sciences); 0 = program areas with average salaries at the overall mean (agriculture/home economics, business, natural sciences); -1 = program areas with average salaries below the overall mean (education, fine arts, humanities, social sciences, other fields).

2. Calculation of the percentage allocation of time uses the total work week as the denominator. Since some faculty spent time during the work week on consulting and non-institutional tasks, the total of time spent on teaching, research, administration and service will not add to 100 percent.

3. The criterion for minimally acceptable level of significance for statistical tests was p < .05. When multiple pairs were compared simultaneously, such as in the comparison of each program area mean with the overall average, the acceptable significance level was increased by the Bonferroni adjustment (i.e., dividing the level of significance by the number of multiple comparisons).

4. Estimates of regression coefficients were unbiased. A study of residuals showed no evidence of heteroscedasticity or for the need to transform variables. The analysis of residuals showed no evidence of interaction effects or for the need to explore quadratic or other polynomial equations.
REFERENCES


V. POLITICS AND FISCAL STRESS

A. The Role of Political Action in Higher Education

B. The Role of Politics and Lobbying in Alleviating Higher Education Fiscal Problems
When I arrived at the American Federation of Teachers about a year ago, after nearly twenty years in Washington as a political analyst and lobbyist, and Carter Administration appointee in the Education Department, I found that nothing I had experienced had adequately prepared me for the torrent of concern which greeted me. The higher education membership was voicing nearly universal apprehension: "Terrible budget cuts are being proposed for our institution. What can we do about this?"

It is true that everywhere you go, public colleges and universities are being confronted with budget decisions from their state boards, governors and legislatures that go way beyond affecting peripheral activities, and are striking at the heart of education, crippling or eliminating vital services and programs. This fiscal crisis is substantial, and it takes many, many forms.

Over the last two fiscal years, state support for higher education has declined nationwide in real terms for the first time since World War II. In thirty-two states, higher education has lost budget share. Despite double-digit tuition increases, public colleges and universities in half the states were forced last year to reduce course offerings. Others imposed enrollment caps, reduced their staff, imposed wage freezes, or implemented furloughs.

There are a number of causes of this. One was federal cutbacks in education funding during the Reagan-Bush era. More important were the newly mandated services imposed on the states in the areas of health and welfare during the 1980's - expensive mandates with no federal funds to back them up. The courts also imposed mandates on many states to build more prisons, thus sapping potential education funding. The tax revolt meant that taxes could not be raised to make up the shortfall. Finally -- and this is partly a cause of fiscal distress, partly an effect -- higher education was weakened politically by attacks in some quarters that colleges and
universities were not working hard enough and/or well enough on either education, research or service.

In many cases, since last autumn, we at AFT have devoted a lot of time to exploring this situation and to producing a publication that can offer practical advice to unionists; it is now in the last stages of editing and will be called, How to Fight State Budget Cuts in Higher Education: A Guide for Faculty Unions. Much of the following constitutes an advance look at that publication. But first, a few general conclusions based upon my involvement in this area.

The most important conclusion is that faculty unions simply must become actively involved in state battles over their budgets. Most often this involvement assumes the form of appropriations battles (and that is the way I will address the issue here), but budget battles may include dozens of related dimensions. They include proposals to downsize and restructure institutions, to add part-time faculty and to regulate teaching loads. Budget battles may also include campaigns to allow tax hikes.

In any case, the stakes are too high for unions to opt out of the process and confine themselves to a traditional negotiating role. Neither can they take just a supportive role to management, saying in essence, "Point me to the right legislator; tell me what to say and I will say it."

Unions have something unique and essential to bring to the budget wars. This includes the number and expertise of their members, their independence and their ability to participate directly in the electoral process. If faculty unions want their institutions to survive, let alone thrive, they need to capitalize on these capabilities.

From what we have seen, the faculty union needs to be proactive in forming coalitions with administrators and trustees to fight budget cuts, and they need to be leaders in seeing to it that the essential tasks of a successful coalition are being undertaken. If they do these things, there are successes to be found -- sometimes partial successes, sometimes very partial successes -- but successes nonetheless, that would not have been likely without union participation.

That said, however, it is also true that we have found there are distinct limits to any information and advice that can be put forward along these lines. So much depends on the resources that the union has at its disposal, and on the quality of the school's administration. So much depends on the kind of governor and legislature in the state, and most of all, on the amount of red ink the state confronts.

The fact is that when a six-foot wave comes along you can use your swimming skills to stay afloat until it passes. But, if a thirty-foot wave comes along -- and there are lots of thirty-foot waves coming along these days -- your swimming skills may be overridden by the sheer enormity of the forces at work. You may instead have to hold your nose, get tossed around, and pray that you will eventually resurface.
But in less-than-cataclysmic circumstances, there are some useful patterns that can be discerned in fighting budget battles, some approaches that seem to regularly lead to success. In mentioning a few of them, however, I am painfully aware that the ingredients for success may sound awfully obvious, like "use the media," or "hold legislators accountable." But in the context of actual experience, we have found that doing these things is hard and complicated, not obvious, and that they are, therefore, often left undone. Here are some basic lessons from the trenches.

The most important point, already touched upon, is that almost all budget battles are fought, won and lost through alliances: alliances with administrators, trustees, and students at these institutions; alliances with other institutions; alliances with other interest groups; and alliances with bureaucrats and with elected officials in both parties. A key alliance for a faculty union like ours is the alliance with the state AFT federation and with the AFL-CIO in the state.

It is not obvious or easy to form these coalitions. Since the job of the union is most often to challenge administrators and trustees on lots of issues, getting into an alliance mindset on all sides can sometimes be tricky and even painful, but they are the core of a budget strategy. The goal for the union, I think, is to form coalitions without losing its own source of information, and without losing sight of its own agenda. And the challenge is to gain the acceptance of other key players for this independent role.

The most effective coalitions are based on a clear definition of mission and a clear understanding of the special role of each party. All parties have to discuss at the outset exactly what they agree on, what they do not agree on, how they want to handle the things they do not agree on (Will you be silent on some issues? Go your own way publicly?), and how they will work together. It may be a good idea to create a formal coalition that parcels out lobbying tasks and is run by a steering committee representing all of the key players.

Most coalitions are led by the school administration, which is usually in the best position to staff, coordinate and provide information for the effort. Boards of trustee have prestige that make them excellent spokespersons and give them the ability to open doors at important times. Students have the unique ability to act crazy and say irresponsible things, which can make them invaluable. As I said earlier, the union makes an essential contribution through the expertise of its members, its independence and political action capabilities.

Looking beyond the campus, effective coalitions have reached out to the business community, to good government and civic groups, to other institutions of higher education in the state, and also elementary and secondary interests, if that can be worked out politically. We have already mentioned the role organized labor can play. Alumni should certainly be part of the coalition; they are numerous, often affluent and politically connected.
So all elements of the campus should be mobilized in a coalition setting. But it is equally important, from the union perspective, that the union have its own sources of information. For example, one factor mentioned again and again in the field is that the faculty union must develop its own independent capacity for analyzing how the state budget plays out in campus operations. This is the only way to assure that the union can speak intelligently on institutional priorities and avoid being co-opted or buying into someone else's agenda during the legislative process.

This is not to say that administrators are the enemy, but neither should they be the sole repositories of key information. Administrators and unions are likely to be close allies in the macro battle, the battle to hold off cuts. But they are also likely to have very different ideas from the faculty about how funds are allocated at the campus level. As a result, they have a natural, vested interest in highlighting some choices at the expense of others, and in masking options that do not conform to their preferences.

Unions, obviously, are not immune to that either. In any case, it is important that the union retain an independent capacity in this regard, and one of the most popular people on our staff is a fellow who goes around the country analyzing budgets for locals and showing local leaders how to do it themselves.

Another kind of information is key to a successful budget battle: What you know about your own institution. It seems to me that colleges do four things of political interest and importance. They provide an education and a credential that citizens greatly value for themselves and their children. They supply a high level workforce needed for economic growth. They conduct research that helps the economy in a variety of short-term and long-term ways. And, they establish direct relationships with business interests, schools of the community. All four of these things can be brought into the play.

It is crucial to assure that solid information about the institution's productivity and contribution to the community is made available to every key actor in the political process. This is especially apt for community colleges where the connection between education and the economy is most easily illustrated. But good institutional impact data can be, and has been, generated for all kinds of institutions to great effect. Frankly, I think this information is sometimes seen as a peripheral matter -- it is certainly one of the least sexy aspects of lobbying -- but I think it is terrifically important in the long run.

I will leave it to others to get into the successes and failures, and the do's and don't's of their own lobbying campaigns. I would just like to make a couple of points.

The first is my own feeling that many coalitions devote too much time to the legislature and not enough to the executive branch. Even though there are more people in the legislature, it is in many ways easier to grab hold of because
it is so accountable and its processes are more public, but
year-round cultivation of the executive branch may be even
more crucial. The executive branch is the first out of the
box with financial proposals, and that is always an advantage.
The executive branch has the greatest storehouse of
information; everyone relies on its figures sooner or later.
The third reason, of course, is the direct power of the
governor, which varies from state to state, but is often
considerable, especially where there is a line-item veto.

In terms of the legislature, I just want to highlight
what a personal, year-in and year-out business, legislative
work is. Developing and maintaining good profiles of the
legislator, the people he or she listens to, the businesses
they are in and the like, is essential. Visiting legislators
at least once a year, simply to talk about the institution, to
praise the state aid you receive, and to invite the legislator
to visit your campus, is a hallmark of successful legislative
relations. The importance of a bipartisan approach was
stressed by all of the most successful coalitions.

Another important and often overlooked role is
campaigning through the media. One contribution of the union,
for example, can be to develop and fund advertising, to find
ways to comment on public issues through the media, or to
simply help faculty think in terms of the media value of their
activities, especially the economic dimension and the people
dimension. To say the least, this is a perspective that does
not come immediately to the minds of most faculty members, and
is usually not welcomed when it does come to mind, but it can
be most valuable in a lobbying campaign.

Finally, a successful lobbying campaign almost always has
an electoral dimension. Legislators respond to the facts,
yes, but they respond best to facts presented to them by
organizations who have helped them, or could help, in the
campaign just ended or the campaign to come. Unions are
generally alone among higher education actors in their ability
to bring real influence to bear in the electoral process
through endorsements, political action committees, funding,
mobilizing workers, and, just speaking for ourselves, drawing
upon organized labor.

I will stop for now, recognizing that these steps may
look obvious to some and to others they may seem impossibly
beyond their resources. The point is not that every party to
a coalition has to undertake every activity here. Instead,
the point is that most of the time, the key to developing
effective counter pressure in budget battles is based on
coalition building; that successful coalitions need to attend
to each of these activities; and, from the union perspective,
that it is in the union's interest to opt into that process as
much as possible and as independently as possible.

Now my very good friend, Susan Frost, the Director of the
Committee for Education Funding in Washington, D.C., is not
able to be here today, and, as a result, I wanted to say a
couple of words about the federal dimension. Susan heads the
Committee for Education funding, which has revolutionized
education lobbying in the Capital.
CEF consists of about a hundred national organizations, virtually all of the major groups representing education interests. CEF holds these groups together in a coalition around the one issue that unites all of them: getting more federal funds appropriated for education.

The organizations in the coalition disagree about virtually everything else, but they all agree that there should be more money for education. CEF focuses on this and operates, on two different levels. On one level, CEF develops and maintains superb relations with members and staff of the relevant committees in Congress. The key to this is a combination of personal relations and a comprehensive education budget analysis that they do each year, which is used by nearly every office on Capital Hill.

Second, they have learned over the years how to mobilize the grass roots support networks that organizations such as the School Boards Association, the PTA, and the Community College Association have all over the country. CEF sends its constituents a simple message at key points in the legislative process, and the group is very effective at bringing pressure to bear at the right time. This strategy made them extraordinarily successful during the Reagan Administration in inducing Congress to reject education cutbacks and, in fact, to increase overall funding in that area. I might add that they are renowned for the bipartisanship with which they bring this off.

I want to say one last word about the federal role and the interconnection between federal and state funding of higher education. As I noted at the outset, state governments are reducing the share of resources devoted to higher education in large part because of the huge increases in health and welfare, and correction issues. My boss, Al Shanker, has often said that the best thing that President Clinton can do for education is not simply to pass more money for education programs, but also to take the burden of health care off of the states and to reduce the state welfare burden.

If this can be brought off, the states would for the first time in years have at their disposal funds to get back into the business of providing education the support it needs. Now, by saying this, I am not saying that all of higher education's problems at the state level are based on funding constraints in other areas. Higher education has very significant political problems all its own, problems that will outlast any transient fiscal crisis. Key among them, as I already mentioned, is the feeling on the part of so many legislators and voters, that higher education institutions are not devoting the attention to teaching that they should, that educators are too preoccupied with research, and that maybe they are not working hard enough in the first place.

These are serious problems that will have repercussions unless we come to grips with them. But the point remains that federal lobbying activities must not be restricted to educational funding, and that state lobbying activities must always take into account these outside factors.
POLITICS AND FISCAL STRESS

B. THE ROLE OF POLITICS AND LOBBYING IN ALLEVIATING HIGHER EDUCATION FISCAL PROBLEMS

Lawrence K. Pettit, President
Indiana University of Pennsylvania

A hard-headed, unreconstructed realist might have ended this talk after the recitation of its title. What degree of freedom, after all, do governors and legislators have left for higher education to influence? But since one cannot be a university chancellor or president these days without being some sort of idiot-savant -- idiotic for accepting the job, but practiced and learned in spin control and the reduction of cognitive dissonance -- I suppose that, having chosen this role in four states during the past twenty years, I am a likely candidate to lie a little just to keep hope alive.

All over the country state financial support for higher education is in decline, but the expectations about what higher education can contribute in achieving both individual and social ends seem unabated. Moreover, as part of a nascent reaction to the excesses and cynicism of the 1980's, there is an erosion of public confidence in all important institutions, including higher education. The reduction of public esteem in our case could be from our becoming virtually indistinguishable from the larger society. Our campuses no longer are quiet sanctuaries from whence their leaders assert moral leadership. Instead, the boundary between university and society has become permeable. The hundreds of boundary relationships at any given campus result in the university's assimilation of external norms and practices to the point that the academic culture loses its distinctiveness. One result is that charges of malfeasance, once reserved for private enterprise -- price fixing, indirect cost profiteering, unconscionable price increases -- are now directed at higher education, and the political backlash touches the innocent among us as well as the presumed guilty. The normative penetration of the campus by the society means also that the crimes of the streets are now the crimes of the campus, and the culture wars that drove 1980's politics are played out, sometimes transformed, on campus. The resulting image is that higher education today is both out of touch and out of control.
Against this unhappy backdrop, let me focus on four aspects of what I regard as the reality of our political circumstance.

First, governments will continue to experience fiscal problems. The global information-driven economy sounds fun and exciting, and like the right vehicle for arguing the imperatives of investing in human talent through education. But it also means, or has meant, the relative weakening of the American economy, with a growing inability to compete. The fact that we refer to the economy as "global" -- signals the loss of American hegemony. Where once we dominated, we now spend time and money figuring out how to be competitive. One could argue that, for the past decade, "competitiveness" was thought by our government to result from a laissez-faire attitude toward business rather than from investment in our people. The weakening of our competitive position is made worse by the almost unfathomable national debt, and the partisan and interest group impediments to doing anything about it. There is no quick fix. It will take time before the federal government increases direct support for higher education, or before it begins to bail out the states.

Meanwhile, decline state revenues reflect the general slowdown of the economy and, in the face of less revenue, the states confront greater challenges. The state governments are faced with federal mandates that do not carry financing, and with trying to solve an array of social problems that, themselves, have resulted from a legacy of inadequate investment in early childhood programs at education. We can expect that for several more years, those budget claimants that receive the most attention will be those that benefit from court orders, federal mandates or very powerful PAC's. Increasingly, money goes to health care, to equalization programs for elementary and secondary education, and to prisons. When I worked in Illinois I was chagrined to observe that the small towns that dot the state had no sense of the importance of universities to their economic destiny, but fought vigorously over new state prisons as the one sure route to local economic development.

In most if not all states, higher education has become the last remaining discretionary part of the budget of any consequence, and legislature after legislature balances the budget with higher education. There is nothing tangible at this time to indicate that this circumstance will change.

Second, if higher education is to be successful in the political process, we must learn to build coalitions, and we must improve our communications to the non-academic world. Surely at the state level we can find common ground with business -- especially the newer, entrepreneurial, technology-based companies -- in the manner that our land-grant colleges have done historically with agriculture. If we can shift effectively from paternalism to partnership in our relations with the public schools, we should be able to sustain a political alliance within all of education. If we can learn to serve labor better -- through labor studies centers, leadership development and worker retraining -- we should be
able to find common cause in human investment. The list could
go on and on, and it ought to. But let me suggest a practical
problem. These kinds of relationships are established and
sustained by a particular persons or units within a
university, and the allegiance of the outside groups does not
easily or automatically transfer to the institution as a
whole, and certainly not to higher education as a state-wide
interest. Thus, we could have a series of friendly and
productive working relationships that seldom are folded into
a politically useful coalition. It is time we figured out how
to take the next step.

Coalition building should involve more attention to
internal constituencies as well. Students have shown that
they can have political impact through demonstrations and
disruptions, and that they can be astute lobbyists. But they
have not become an effective voting block that has to be
reckoned with by political candidates. As for the
professorate, someone has said that leading the faculty is
like herding cats. They are an independent and heterogeneous
lot. But faculty have to be part of any successful coalition,
and must be able to link their interests to institutional
interests. Parents and alumni have other identities and
interests that govern their voting behavior, and only rarely
can be galvanized into an effective alliance behind higher
education issues. But it can be done, as was shown in
Illinois in 1988 with a successful attempt to enact an income
tax increase earmarked for education.

The Illinois campaign is a useful case study in
successful coalition building toward a particular goal. I
shall touch on it only briefly here. The strategy was to put
together an effective statewide leadership group, permanently
staffed, to direct efforts at securing widespread editorial
support, an opinion survey with favorable results, and
eventually legislative enactment of the tax increase.

The Board of Directors for the campaign consisted of the
executive director of the state coordinating board and the
heads of the four public university systems, the state
community college system and the state student financial aid
agency. As Chancellor of Southern Illinois University at the
time, I was able to persuade the Dean of our College of
Communications and Fine Arts on the Carbondale campus, Keith
Sanders, to take a leave of absence to direct the campaign.
Sanders, now Chancellor of the University of Wisconsin at
Stevens Point, is an established scholar in political
communication and had been SIU's governmental relations
director at one time.

In addition to the public universities and community
colleges, the coalition included the private institutions
through their organization, and the public schools through the
State Board of Education and its officers. Members of the
Board of Directors worked with the major new media in Chicago
and individual chancellors and presidents secured editorial
endorsements in their local newspapers. All alumni
organizations were solicited to help and an alliance of alumni
organizations was established to provide statewide
coordination. Students and faculty on each campus wrote
letters to legislators, coordinated at the state level. Campus presidents solicited the help of parents.

Opinion surveys, conducted after the educational and editorial phase of the campaign, indicated that about 70 percent of the voters would support an increase in the income tax if it were earmarked to education. Armed with that datum and with a well-prepared case of need, letter-writers, speakers and lobbyists were able to apply enough pressure to secure enactment. The governor, who had endorsed the effort at the outset, was pleased to sign it.

That was a magnificently orchestrated campaign, but I suspect that by now the coalition has dissipated and that there is no mechanism in place to reactivate it annually in behalf of higher education appropriations. Moreover, a new governor requires only a few replacement appointments to convert the various higher education boards from advocates to auditors, more concerned with downsizing, productivity and cost-effectiveness than with securing additional resources for the campuses. Without the support of governing and coordinating boards, such grand coalitions on a statewide basis are virtually impossible to form.

I believe that higher education must find a way to establish more enduring political coalitions if we are going to be a major player in state or national politics. Occasionally, as in Illinois, we can mount an extraordinary effort and build a temporary coalition for a specific initiative. But our success over the long haul will depend on the permanent coalitions we are able to establish, less grand than the one described here, but more dependable.

Third, from my perspective as a president, I believe that every institution should undergo periodic self-examination (aside from accreditation self-studies) to refocus itself if necessary, and to check the validity of its critics. The process is healthy internally and it also sends a positive message to the political world about responsibility and purpose. Such periodic self-analysis also exposes our political agenda to reconsideration and reaffirmation — itself a healthy process that might save our entreaties from becoming too hackneyed and predictable.

Fourth, not only do our institutions need to ensure that they are managed tightly, we need to communicate better about how cost-effective and productive and accountable we are, and about how our efficiency and productivity ought and ought not be measured. Moreover, we need to communicate externally about those state legislative and bureaucratic regulations that make us manage less effectively than we otherwise could in such matters as purchasing, grants processing and personnel. Similarly, we need to communicate internally about those negotiated contract provisions that in their observance make the administration vulnerable to attacks of soft management, and that consequently lead to the erosion of political support for the institution.

Finally, I think it is important that we rededicate ourselves to helping to solve some of society's problems. We
can say that the nation's economic, political and cultural health depend on well-supported colleges and universities, but it is politically more useful if we can demonstrate it. It is also apparent that higher education, in most states, will not be getting a larger share of state revenue; it is to our advantage, therefore, to contribute visibly to enlarging the economy and increasing revenue.

I end with a plea that we work together on our campuses to enhance the political effectiveness of each institution and of higher education generally. For example, we can be more sensitive to how our internal politics look to non-academic observers and to the external political consequences of our internal political behavior. Administrators can be more careful to share the institution's political agenda with internal constituencies, and in so doing to enlist their support. Too often administrators do not want to give faculty, staff or students a piece of the action in institutional relations. Perhaps just as often the constituency groups want to pursue only their own particular causes without adequate concern for the more general institutional interest. In some cases, campus constituency groups have even attempted to use the political process to punish, reprimand or even remove campus administrators. Luckily, we are free of that sort of thing at IUP. But there is probably room for improvement everywhere in how we work together internally to optimize our institutions' political effectiveness. If we are successful, maybe someday politics and lobbying actually will alleviate higher education's fiscal problems.
VI. DISCRIMINATION AT THE ACADEMY

Sexual Harassment

A. Sexual Harassment on Campus and a Union's Dilemma

The Americans with Disabilities Act (ADA)

B. A Guided Introduction to the Employment Provisions of the Americans with Disabilities Act

C. American Disabilities Act: An Advocacy Perspective

D. Complying with the Provisions of the Americans with Disabilities Act

Pay Equity

E. A Study of Equal Pay for Faculty at Twenty-Nine SUNY Institutions: Labor/Management Negotiation, Aggravation, Experimentation, and Implementation

F. People of Color in Academe: Equity, Discrimination, or Reverse Discrimination?
DISCRIMINATION AT THE ACADEMY:
SEXUAL HARASSMENT

A. SEXUAL HARASSMENT ON CAMPUS
AND A UNION'S DILEMMA

Rachel Hendrickson, Organizational Specialist
National Education Association

Sexual harassment is illegal discrimination and, as such, may already be prohibited by non-discrimination or equal opportunity clauses in higher education bargaining agreements. Institutions of higher education have developed extensive policies covering various aspects of reporting alleged incidents of harassment, providing confidentiality for accused and accuser, and setting up investigation and discipline procedures. However, where a collective bargaining agreement exists, such procedures may come into direct conflict with contractual due process standards, information disclosure requirements, and disciplinary clauses.

Sexual harassment cases provide dilemmas for the union and its advocates. The first dilemma a union faces is whether to include a section on sexual harassment in its contract, to leave one out but influence the development of campus policies, or to allow those policies to be developed and implemented with the contract functioning as a court of last appeals through its grievance and arbitration process in any disciplinary action that might be taken against a unit member.

On the one hand, a union is charged with the responsibility of advocating for all its members and, under most contracts, ensuring standards of due process are followed. On the other hand, as we understand more about the damages caused by sexual harassment, as we see stories featured in The Chronicle of Higher Education about cases on campus, about attempts to prohibit all sorts of consensual relationships, about recent decisions such as Franklin defining the potential liability of institutions that do not take adequate care to protect their students or employees, unions need to consider whether they should develop protections and language within their contracts both to ensure their members are protected during complaint procedures and to ensure that there are no reprisals taken against either the complainant or the accused.
As part of its Academic Justice and Excellence series, the NEA has recently published a monograph by Louise Fitzgerald, "Sexual Harassment in Higher Education: Concepts and Issues." In addition, NEA is preparing an edited book on various aspects of sexual harassment on the campus. Research is also being conducted into contract clauses and language in higher education bargaining agreements. Those contracts provide information on how some units have approached the issues raised in the previous paragraphs.

There are very few higher education contracts in the database that address the issue of sexual harassment in any great detail. While there are institutions with effective complaint and investigation procedures, some of which are contained in the "Appendix" of the previously mentioned monograph, not many are translated into contractual language. Those that have attempted to handle the issue within the contract have some elements in common: They follow the definitions of Meritor and the EEOC; they appear to attempt to keep the issue on campus by providing a forum there, instead of through the EEOC, state agencies, or the courts.

The following examples of contractual provisions provide a good sample of the definitions and procedures available.

Among those contracts that handle the issue of sexual harassment, some provide extensive clauses and procedures, but the majority provide only limited mention of the issue usually by adding a brief section on discipline.

Oakland Community College's 1990-92 contract had, at the end of a routine equal opportunity section, the clause "nor will sexual harassment be tolerated, in its employment practices." The 1992-95 contract maintains that and adds "and/or educational programs or activities." This clause has the effect of including both Title VII and Title IX protections in the contract.

The McHenry County College states,

The Board shall adopt a progressive discipline standard and denote which infractions are subject to which penalties. Except as specifically noted (e.g., assault, theft, inebriation on the job, sexual harassment, etc.), warnings shall be given and an opportunity rendered to remediate any deficiency noted.

Thus, at McHenry, sexual harassment appears to be a capital offense.
An example of a policy section comes from Shawnee State University: It is the policy of Shawnee State University and the Association to maintain an educational and employment environment that is free from sexual harassment and hostility. If there is a complaint of sexual harassment against a faculty member, the provisions in the Agreement shall be followed. (Sec. 7) (The provisions referred to are those concerning discipline).

Skagit Valley College simply references the college policy: "Sexual harassment matters shall be handled in accordance with the Sexual Harassment Policy ... and applicable terms of this Agreement." The Clark College agreement is much more comprehensive in its coverage of the issue. The Agreement first covers the issue of due process and representation for the accused. For general "offenses," there is a statute of limitations on records of the event or reprimand -- three years. After three years, the personnel file is purged of all information on complaints. The two exceptions are for instances of drug/alcohol abuse and sexual harassment.

Clark College also includes a fairly extensive section on the definition of sexual harassment and procedures for filing a complaint. The initial language of the contract defining sexual harassment basically follows Meritor or the EEOC guidelines, but links the problem directly to the academic setting.

Defining the issue as a situation that "involves the inappropriate introduction of sexual activities or comments that demean or otherwise diminish one's self-worth on the basis of gender into the work or learning situation," the contract adds academic relationships to the EEOC language; that is, when the implicit or explicit submission or rejection to connect affects academic standing or when the hostile or intimidating environment creates an offensive working or educational environment.

The contract combines in its definitions both discriminatory relationships involving faculty and students, and faculty and other faculty or peers:

Sexual harassment often involves relationships of unequal power and contains elements of coercion -- as when compliance with requests for sexual favors becomes a criterion for granting work, study, or grading benefits. However, sexual harassment may also involve relationships among equals, as when repeated sexual advances or demeaning verbal behavior have a harmful effect on a person's ability to study or work.

Thus, the contract combines both Title IX and Title VII issues, defining as inappropriate discrimination against faculty and students. Faculty are allowed to elect which complaint procedure to follow - either the college's sexual harassment grievance procedure or the contractual grievance procedure. Fitzgerald notes the importance of multiple
channels for complaint (p. 41). Here is an instance where the faculty member may avail herself/himself of a choice of two.

The final section in the harassment portion of the contract provides for confidentiality for both the accused and the complainant, although it provides no further guidance than the warning that it must be maintained.

Because of the college's strong policy on due process rights, under the contract, the burden of proof in any discipline case rests with the college. The college has an additional responsibility -- that of pursuing the issue "in a timely manner." Once any complaint about any potential disciplinary concern is brought forward, the college is required to call it to the attention of the faculty member in a timely manner or it may not be used as the basis for any disciplinary action. A college that ignores complaints cannot later use them.

The Youngstown University Professional Staff agreement provides for reporting all allegations of discrimination to the Affirmative Action Office. It limits the extent of the processing of the allegations to the third step of the grievance procedure. Thus, it appears that no binding resolution exists under the agreement.

The Florida State University System (FSU) has one of the most extensive sections on sexual harassment found in the database. It covers intent, policy, definition, investigation and election of remedies.

The FSU sexual harassment policy is contained within its non-discrimination article. The "Statement of Intent" within the article expresses a firm commitment on the part of both union and university:

They desire to assure equal employment opportunities within the SUS and recognize that the purpose of affirmative action is to provide equal opportunity to women, minorities and other affected groups to achieve equality in the SUS. The implementation of affirmative action programs will require positive actions that will affect terms and conditions of employment and to this end the parties have, in this Agreement and elsewhere, undertaken programs to ensure equitable opportunities for employees to receive salary adjustments, tenure promotion, sabbaticals and other benefits.

The policy section first defines its non-discrimination thrust, then moves to a specific discussion of sexual harassment from a legal and precedential view and then a philosophical view. Sexual harassment is defined by incorporating into the contract sections of the Meritor decision, citing both quid pro quo and hostile environment harassment.

The agreement next explores the issue of consensual relations within the academic context:
In addition to the parties’ concern with respect to sexual harassment in the employment context, the parties also recognize the potential for this form of illegal discrimination against students. Relationships between employees and students, even if consensual, may become exploitive and especially so when academic or athletic endeavors are supervised or evaluated by the employee... These relationships may also involve a conflict of interest.

Thus, while consensual relationships are not forbidden, the warning is clear that such relationships might result in a violation of other sections of the contract.

The issue of consensual relations is, indeed, a thorny one, as exemplified by the recent controversy on the campus of the University of Virginia. The NEA has established policy on personal relationships that it encourages its units to follow:

The National Education Association recognizes that in institutions of higher education adult students and educators may establish personal relationships. However, such relationships should be voluntary and not be used to coerce or influence others for personal advantage. Thus, the Association believes that sexual relationships between a faculty member and student currently enrolled in the faculty member's course, or under the supervision or direction of the faculty member are unprofessional. The Association urges its affiliates in institutions of higher education to establish strong policies declaring such relationships unprofessional.

The FSU contract provides for access to all relevant documents except for those protected by law. It also provides for an election of remedies. The parties express their intent to resolve any complaints under the grievance procedure of the contract rather than through the courts or under other procedures. The Union agrees "not to process cases arising under this Article when alternative procedures to Article 20 (the Grievance Article) are initiated by the grievant." Thus, a grievant must elect either to use the grievance process in the contract or court, but cannot immediately do both. Presumably, once a person alleging sexual harassment has completed the grievance procedure under the contract, he/she is not barred from then seeking redress through the courts if not satisfied with the outcome otherwise, since the Supreme Court ruled in Alexander v. Gardner-Denver that in cases of discrimination, a complainant may have two bites of the apple this section could not foreclose that.

Should a bargaining unit decide to include provisions concerning sexual harassment within its contract, what are the elements that need to be considered for inclusion in the collective bargaining agreement?

1. I like the concept of a statement of intent or of philosophy. If sexual harassment is to be eradicated on the
campus, both parties to an agreement should affirm clearly
t heir belief that harassment is wrong. Both should make a
statement, similar to that of FSU's concerning their
determination not to tolerate harassment.

2. What constitutes sexual harassment needs to be defined
within the contract for two reasons. First, faculty and staff
need to know the boundaries of acceptable conduct and
understand when those boundaries have been breached, either
when it is pointed out to them through a disciplinary process
or informal consultation, or when they believe they have
been harassed. Second, where arbitration processes exist, there
are inherent problems in asking an arbitrator to define a
situation as harassment if the parties themselves have not
done so or are unable to do so. Parties need to be able to
weed out inappropriate over-reaction. While definitions and
parameters of sexual harassment are still evolving, the
parties need to ensure that rude or obnoxious behavior is
addressed as such and not as sexual harassment.

3. Standards of due process need to be defined. Since
sexual harassment is illegal discrimination under external
law, some of the more traditional due process clauses where
there is no concern about self-incrimination may not fit the
situation.

Confidentiality is an issue -- both for the accused and
the complainant, particularly in a campus environment where
gossip is part of the culture. While it is not a contractual
issues but an internal union issue, when both parties are
members of the bargaining unit, great care must be taken to
ensure that the rights of both members are protected. It
might be appropriate to define the standards to be used during
an investigation and both the burden and quantum of proof.
Care in the investigation will assure that a harasser will not
later be returned to the educational community by an
arbitrator because of a defective procedure, will assure that
false claims are weeded out and will assure that the person
being harassed also has protections.

Where a separate investigation process exits under a
faculty handbook, the union should consider how limited or
defined in scope any campus hearing arising out of an
investigation should be. It would be a travesty of due
process if a faculty member were to be haled before one
tribunal in which no standards of evidence or process, as we
understand them, are used, found "guilty," terminated or
disciplined, then to have to go through another whole
grievance and arbitration process where the administration
might use evidence or testimony from the first hearing against
him/her. A union should consider very carefully if or under
what limitations it is willing to agree to alternate or
additional hearing processes.

4. I have the personal belief that there should be no
clause providing for election of remedies or delay of filing.
Sexual harassment is covered under external law and under any
contract that has a non-discrimination clause, whether it is
explicitly mentioned or not. There are different standards of
proof in arbitration than in a federal agency or courtroom.
There may be different definitions of what constitutes sexual harassment on a campus. There clearly are different remedies available from the courts than from the arbitration process. Arbitrators are seldom permitted to award damages beyond a make whole in a contract. The recent Franklin decision increased the potential liability for institutions that fail in their responsibility to their students. What should be clear in the contract are the standards an arbitrator is to use in ruling on the presence or absence of harassment. Some arbitrators use EEOC standards in their decisions; some may use a "reasonable woman" standard; some may be left to flounder. It is up to the parties to craft the standards by which an accusation should be judged, discipline imposed, or redress offered.

Also to be considered is the type of information that may be entered into the hearing. For instance, there is some evidence that some arbitrators do take the complainant's sexual activities into consideration. The parties should also agree on the parameters of discipline or redress involved, so an arbitrator has good guidance in crafting a remedy.

5. Along with no election of remedies, a union might want to consider having multiple channels of complaint available to its members. If we assume that most victims of harassment simply wish it to stop and not to be subject to retaliation, the remaining alternatives to an immediate formal complaint procedure might have the desired effect before positions become hardened in hearings. The affirmative action officer or campus committee charged with investigation of mediation, a campus ombudsperson, a committee constituted by the union or some other form of a joint committee are all potential channels.

6. The parties should be clear on what the actual offense is and how it fits into contractual traditions of tenure or just cause. It might be appropriate to class offenses accordingly. Is the offense to be considered sexual harassment, a legal term? Is it to be considered exploitation of students? An abuse of authority? Unprofessional behavior? Simple rudeness? Is it considered an offense warranting institution of proceedings for removal under tenure or one for lesser disciplinary action?

7. Most of the above observations revolve around the assumption that a faculty member has been accused of harassment. Provisions need to be made to protect a faculty member who is being harassed -- either by another faculty or staff member or by a student. If the institution and union have both agreed to actively eliminate harassment, both have a responsibility to protect the victim. Another option to explore is, if the institution does not take steps to protect the faculty member, the availability of a procedure within the contract for the union to file a grievance against the institution and its administration on behalf of a faculty or unit member who is being harassed.

8. I suggest that the parties keep in mind that one of their most important goals is to ensure that sexual harassment does not occur in the first place. Therefore, my final
suggestion is that the parties agree to institute training for all current supervisors and faculty and to provide it on an on-going basis. While the institution of training does not necessarily have to appear in a contract, its presence signals to the academic community that union and administration are serious about their responsibilities.

In the NEA President Keith Geiger's Preface to Fitzgerald's sexual harassment monograph, he states,

Sexual harassment is a matter of particular concern to the academic community. Students, faculty and staff must rely on bonds of intellectual trust and dependence. Sexual harassment can damage careers, negatively impact the educational experience of those harassed, and upset the well-being of the faculty, staff and students. It ... damages the integrity of the academic enterprise.

I suggest that it is crucial for union and administration to work together, through collective bargaining, to ensure that integrity remains intact.
DISCRIMINATION AT THE ACADEMY:
THE AMERICANS WITH DISABILITIES ACT (ADA)

B. A GUIDED INTRODUCTION TO THE EMPLOYMENT PROVISIONS
OF THE AMERICANS WITH DISABILITIES ACT
CAVEAT SUPERIOR
(LET THE BOSS BEWARE!)

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INTRODUCTION: WHAT IS THE BIG DEAL?

Although, according to a recent report, there are just ten lawyers assisted by three paralegals at the U.S. Department of Justice responsible for enforcing the non-employment provisions of the Americans with Disabilities Act (ADA), both employers and employees can rest assured that there are thousands of Equal Employment Opportunity Commission staffers engaged in a nationwide effort to enforce the new law insofar as it regulates the interface of the disabled with employment and the workplace. Depending on your point of view, this may or may not be a good thing, the act itself may or may not be wise law-making. From my point of view as a labor and employment lawyer -- and from that of the EEOC, where disability discrimination charges are reportedly being filed against employers at the rate of 1,000 per month -- the new act is in any event a very important thing.

As the culmination of the development of legal protections for disabled individuals over the last twenty years or so, the ADA may be ignored by no sensible employer. My role today is to educate you about the ADA's intentions, concepts and structures as they relate to employment. If, as many observers believe, the Americans with Disabilities Act is the most significant piece of Civil Rights legislation since the Civil Rights Act of 1964, our time today will be worthwhile.

LEGISLATIVE INTENT: WHAT IS THE POINT?

In the ADA's employment section, Title I, Congress enacted a sea-charge concerning the obligations of the nation's employers regarding the estimated 43 million individuals with disabilities. Unlike predecessor federal
statues like the Rehabilitation Act of 1973, a covered employer is obligated not to discriminate against a qualified disabled individual whether or not the employer is a government contractor or sub-contractor or is a recipient of federal funds. In other words, the vast majority of purely private employers, who previously had no such obligation under federal law, are now prohibited from disability discrimination. Congress decided to require that disabled individuals who are able to perform a job's essential function must be permitted to do so basically on the same terms and in the same places as their non-disabled peers. Thus, the ADA aims toward the complete integration of disabled people into the nation's employment system and setting. As is becoming more and more evident, employability and employment are the sine qua non of economic success in America. The ADA aims to bring to the sizeable disabled minority population the fullest employability, as enjoyed by the non-disabled, shifting the cost burden to the employer.

STATUTORY SCHEME: HOW DOES IT WORK?

Oversimplified, it works this way: If, despite my disability and despite some cost to be borne by my employer, I can perform the basic functions of the job I have or want, my disability is an unlawful reason for my employer to deny it to me or treat me differently from other, non-disabled employees. The basic particulars follow:

A. Effective Dates and Covered Employers: What Employers Does it Cover and When?

The Americans with Disabilities Act was signed into law by President Bush on July 26, 1990.

Several ADA provisions, such as Title II, dealing with disability discrimination in providing services by public entities like state and local governments and most of Title III, dealing with private entities maintaining public accommodations, commercial facilities and transportation services, became effective on January 26, 1992. Other parts, such as those relating to newly constructed facilities and a provision regarding the telecommunications industry, became effective July 26, 1993.

But Title I, the employment provision, became effective for all covered private and public employers with twenty-five or more employees on July 26, 1992. The net will widen when, on July 26, 1994, the ADA becomes effective for those with fifteen or more employees.

The requirements of Title I apply to a "covered entity," meaning:

... an employer, employment agency, labor organization, or joint labor management committee.

As stated, eventually, all private and public employers with fifteen or more employees will be subject to the requirements of Title I of the ADA as it is phased-in.
Because the definition of the term "employer" found in the ADA is nearly identical to that contained in Title VII of the Civil Rights Act of 1964, the EEOC -- the federal agency with responsibility for enforcing the employment title of the law -- will give that term essentially the same meaning under the ADA as under Title VII. The federal government, which is subject to the Rehabilitation Act of 1973, Indian Tribes and bona fide tax-exempt private membership clubs are not considered employers under the Act.

B. Protected Individuals: What People are Covered?

The protected class under the ADA is composed of any employee or applicant for employment who is a "qualified individual with a disability." (EEOC Regulations at 29 C.F.R.§ 1630.4). There are three discrete concepts in the definition of the protected class under the ADA. First, an individual must have a disability in the sense that he or she has a "physical or mental impairment." Second, that impairment must be such that it "substantially limits one or more of the major life activities" of the individual. Finally, despite that impairment, the individual must be "qualified" for the position in question, in that he or she can perform "the essential functions of the position that such individual holds or desires." Several general observations are in order.

First, the determination whether each required element of the definition of a protected individual is present will "of necessity ... be made on a case-by-case basis." (56 Fed. Reg. 35726). It is entirely possible that an individual who would be deemed a "qualified individual with a disability" vis-a-vis one employer would not be deemed such an individual as regards to another employer. Different legal conclusions as to the protected status of an individual will be reached where there are differences in such factors as the geographic area where the employer is located; the field of employment involved; and, the size and financial condition of the particular employer, about which more will be discussed.

Second, it is not necessary that an individual currently be suffering from any mental or physical impairment to fall within the protected class. In the Act, the term 'disability' means, with respect to an individual --

(a) A physical or mental impairment that substantially limits one or more of the major life activities of such individual;

(b) A record of such impairment; or

(c) Being regarded as having such an impairment.

Thus, the ADA specifically protects individuals who have "a record of such impairment" or who are "regarded as having such an impairment." According to the EEOC's regulations, the former situation occurs where an individual is not currently suffering from a covered impairment, but "has a history of, or
has been misclassified as having, a mental or physical impairment." (29 C.F.R. § 1630.2 (k)). The latter situation occurs where an individual has a mental or physical impairment that substantially limits a major life activity only because of the manner in which it is treated by a covered entity or as the result of attitudes of others towards the impairment. This latter situation may also occur where an individual has no impairment but is treated by a covered entity as if such an impairment exists. So, "an individual rejected from a job because of the 'myths, fears and stereotypes' associated with disabilities would be covered under this part of the definition of a disability, whether or not the employer's or other covered entity's perception were shared by others in the field and whether or not the individual's actual physical or mental condition would be considered a disability." (56 Fed. Reg. 35743).

Finally, in certain circumstances, individuals will be in the protected class based solely on their relationship to a disabled individual. As Section 1630.8 of the EEOC's regulations states:

It is unlawful for a covered entity to exclude or deny equal jobs or benefits to, or otherwise discriminate against, a qualified individual because of the known disability of an individual with whom the qualified individual is known to have a family, business, social or other relationship or association.

This protection would be available to one who is refused employment because of the employer's belief that the individual would have to miss work or frequently leave work early in order to care for a disabled spouse. The provision covers not only the fact of employment, but also all other benefits and privileges of employment. The EEOC has noted that this aspect of the ADA would prohibit an employer from reducing the level of health insurance benefits to an employee simply because that employee has a dependent with a disability, even if the result is increased health insurance costs for the employer. (56 Fed. Reg. 35747).

However, individuals protected solely based on an association with another disabled individual do not have full ADA protections. Specifically, an employer does not have to provide this non-disabled employee with reasonable accommodation because that duty only applies to qualified applicants or employees with disabilities. Hence, there would be no obligation for an employer to alter the work schedule of a non-disabled employee to enable that employee to attend to the needs of a disabled spouse.

Also, citizenship status or nationality is irrelevant. ADA protections are not limited to American citizens, but extend equally to authorized aliens and even illegal aliens. (56 Fed. Reg. 35740).
C. Covered Physical or Mental Impairments: What Disabilities are Covered?

The ADA was intended to protect people with a broad range of disabilities, both mental and physical. The EEOC Regulations define the term "physical or mental impairment" as:

(1) Any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive; genitourinary; hemic and lymphatic; skin; and endocrine; or

(2) Any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities. (29 C.F.R. § 1630.2 (h)). But, specific exclusions limit the breadth of this definition.

The ADA specifically excludes from the definition of "disability" various sexual preferences and sexual behavioral disorders, such as transvestism, transsexualism, homosexuality, bisexuality, pedophilia, exhibitionism and voyeurism, as well as compulsive gambling, kleptomania and pyromania.

It is also important to distinguish between "conditions that are impairments and physical, psychological, environmental, cultural and economic characteristics that are not impairments." (56 Fed. Reg. 35741). According to the EEOC, the term "impairment" does not include: Physical characteristics such as eye color, hair color, left-handedness, or height, weight or muscle tone within "normal" range, and are not the result of a physiological disorder; characteristic predisposition to illness or disease; pregnancy; common personality traits such as poor judgment or a quick temper, where these are not symptoms of a mental or psychological disorder; environmental, cultural or economic disadvantage such as poverty, lack of education or prison record; and advanced age, in and of itself.

Significantly, the definition of disability also requires that a physical or mental impairment must substantially limit one or more of the individual's major life activities. The EEOC has noted that "many impairments do not impact an individual's life to the degree that they constitute disabling impairments." "Some impairments may be disabling for particular individuals but not for others, depending on the stage of the disease or disorder, the presence of other impairments that combine to make the impairment disabling or any number of other factors." (56 Fed. Reg. 35741). 

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"Major life activities" include functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working. (29 C.F.R.§ 1630.2 (i)). A major life activity will generally not be substantially limited by a "temporary, nonchronic impairment of short duration, with little or no longterm permanent impact," such as "broken limbs, sprained joints, concussions, appendicitis, and influenza." (56 Fed. Reg. 35741). Further, determination of whether an individual's impairment substantially limits a major life activity is to be made on the basis of a comparison with the abilities of "the average person in the general population."

Where an individual is not substantially limited with respect to any other major life activity, it then becomes necessary to determine the individual's ability to perform the major life activity of working. The following factors are to be considered:

1. The geographical area to which the individual has reasonable access;

2. The job from which the individual has been disqualified because of an impairment, and the number and types of jobs utilizing similar training, knowledge, skills or abilities, within that geographical area, from which the individual is also disqualified because of the impairment (class of jobs); and/or

3. The job from which the individual has been disqualified because of an impairment, and the number and types of other jobs not utilizing similar training, knowledge, skills or abilities, within that geographical area, from which the individual is also disqualified because of the impairment (broad range of jobs in various classes). 29 C.F.R. § 1630.2 (j) (3) (ii). The EEOC regulations state that an individual is substantially limited in the major activity of working where he or she is "significantly restricted in the ability to perform either a class of jobs or a broad range of jobs in various classes as compared to the average person having comparable training skills and abilities." (29 C.F.R. § 1630.2 (j) (3) (i)). But, "an individual is not substantially limited in working just because he or she is unable to perform a particular job for one employer, or because he or she is unable to perform a specialized job or profession requiring extraordinary skill, prowess or talent." (56 Fed. Reg. 35742).
D. Determining Status as a "Qualified Individual":
When do the Protections Apply?

Obviously, being "disabled" does not guarantee employment of choice, even under the ADA. In addition to being disabled, the individual must be "qualified" for the job in question before the protections of the ADA are triggered.

"Qualified" has a special meaning in the context of the concept "qualified individual with a disability," which means:

An individual with a disability who, with or without reasonable accommodation, can perform the essential functions of the employment position that such individual holds or desires.

In the EEOC's regulations, a disabled individual is "qualified" where he:

satisfies the requisite skill, experience, education and other job-related requirements of the employment position such individual holds or desires and, who, with or without reasonable accommodation, can perform the essential functions of such position. (29 C.F.R. § 1630.2 (m)).

These definitions restrict employers' freedom to determine how to judge whether an employee or applicant is "qualified" for a particular opening in two important ways. First, employers must make judgments solely on the person's ability to perform the "essential functions" of the job. By implication, there may be aspects or duties of a job than an employer would like to see accomplished and which have always been included in the job, but which a court would later deem "non-essential." An employer may be found to have violated the ADA if it excluded a disabled individual from the job in question based upon his or her inability to perform "non-essential" elements of the job.

Second, an employer may not judge an individual's ability to perform the essential functions of a job solely in the context of the job's present configuration or the employer's present personnel practices. Rather the employer must, in certain circumstances, alter a job's present configuration or its present personnel practices to accommodate the disability, thereby allowing the person to perform a job which otherwise he could not.

In addition, the EEOC has cautioned that the determination must be "based on the capabilities of the individual with a disability at the time of the employment decision, and should not be based on speculation that the employee may become unable in the future or may cause increased health insurance premiums or workers' compensation costs." (56 Fed. Reg. 35743).
Essential Functions of a Job: What About the Job Really Count?

In general, "essential functions" means fundamental, basic, necessary, or vital duties of the job, not marginal functions. A job function may be considered "essential" for any of the following reasons:

(i) The reason the position exists is to perform that function;

(ii) Because of the limited number of employees available among whom the performance of that job function can be distributed; and/or

(iii) Because the function may be highly specialized so that the incumbent in the position is hired for his or her expertise, or ability to perform the particular function. (29 C.F.R. § 1630.2 (n)).

The following types of evidence should be considered:

(i) The employer's judgment as to which functions are essential;

(ii) Written job descriptions prepared before advertising or interviewing applicants for the job;

(iii) The amount of time spent on the job performing the function;

(iv) The consequences of not requiring the incumbent to perform the function;

(v) The terms of a collective bargaining agreement;

(vi) The work experience of past incumbents in the job; and/or,

(vii) The current work experience of incumbents in similar jobs. (29 C.F.R. § 1630.2 (n) (3)).

The EEOC has tried to allay employers fears that it will soon be instructing businesses on the details of their operations:

It is important to note that the inquiry into essential functions is not intended to second guess an employer's business judgment with regard to production standards, whether qualitative or quantitative, nor to require employers to lower those standards... If an employer requires its typists to be able to accurately type 75 words per minute, it will not be called upon to explain
why an inaccurate work product, or a typing speed of 65 words per minute, would not be adequate. Similarly, if a hotel requires its service workers to thoroughly clean 16 rooms per day, it will not have to explain why it requires thorough cleaning, or why it chose a 16 room rather than a 10 room requirement. (56 Fed. Reg. 35743-44).

(2) Reasonable Accommodation and Undue Hardship: How Far Does the Employer Have to Go?

The ADA defines "reasonable accommodation" with examples of the type of affirmative actions an employer may be required to take to allow an individual to perform the essential functions of a job. These include: (1) making existing facilities used by employees readily accessible to and usable by individuals with disabilities; (2) job restructuring; (3) initiating part-time or modified work schedules; (4) re-assigning a disabled individual to a vacant position; (5) acquiring or modifying equipment or devices; (6) appropriately adjusting or modifying examinations, training materials or policies; (7) providing qualified readers or interpreters; and (8) other similar accommodations for individuals with disabilities. In general, an accommodation is any change in the work environment that gives a disabled individual equal employment opportunities.

Clearly, reasonable accommodation is very fact-specific designed to meet the person's needs and the job's requirements. An employer's duty to make reasonable accommodations to disabled individuals extends to all employment decisions, not just hiring and promotion.

The ADA makes failing to make reasonable accommodation unlawful discrimination unless the employer can show "undue hardship." "Undue hardship" is, in turn, defined as "an action requiring significant difficulty or expense" when considered in light of the following factors:

(1) The nature and the cost of the accommodation;

(2) The overall financial resources of the facility involved in the provision of the reasonable accommodation; the number of persons employed at such facility; the effect on resources and expenses, or the impact otherwise of such accommodation upon the operation of the facility;

(3) The overall financial resources of the employer; the overall size of the employer with respect to the number of employees; the number, type and location of the facilities; and,

(4) The type of operation of the employer, including the composition, structure,
and functions of the workforce of the employer; the geographical separateness, administrative, or fiscal relationship of the facility in question to the total employer.

An important fifth factor involves: "The impact of the accommodation upon the operation of the facility, including the impact on the ability of other employees to perform their duties and the impact on the facility's ability to conduct business." (29 C.F.R. § 1630.2 (d) (1)). In this regard, while a collective bargaining agreement may not be used to accomplish what the ADA would otherwise prohibit, it may be a factor in determining whether a particular accommodation is a reasonable one.

E. Exclusion for Illegal Use of Drugs: Are Substance Abusers Protected?

The ADA states: "For purposes of this title, the term 'qualified individual with a disability' shall not include any employee or applicant who is currently engaging in the illegal use of drugs, when the covered entity acts on the basis of such use." An employer has a right to refuse to hire, or to fire people based on their current use of illegal drugs.

Several points are apparent. First, employers have a seemingly unfettered right to exclude current illegal drug users from employment if that action is taken on that basis. This is so even where an employer can make no showing that the drug use was affecting the employee's ability to perform the job.

Second, the drug use must be "illegal," defined as:

... the use of drugs, the possession or distribution of which is unlawful under the Controlled Substance Act (21 U.S.C. 812). Such term does not include the use of drugs taken under supervision by a licensed health care professional, or other uses authorized by the Controlled Substance Act or other provisions of federal law. (Section 101 (6)).

Thus, employees or applicants may not be excluded from a job because they are taking prescription medication. Of course, if the side effects of that medication prevent the individual from performing the essential functions of the job with or without reasonable accommodation, the individual may be excluded on that basis.

Third, the illegal drug use must be "current," a term not explicitly defined. Successfully rehabilitated former drug users, as well as those currently enrolled in a supervised drug rehabilitation program and who are no longer engaging in such use, are not excluded from the Act's protections. (29 C.F.R. § 1630.3 (b)). With regard to the phrase "currently engaging," the EEOC has said: 168
The term "currently engaging" is not intended to be limited to the use of drugs on the day of, or within a matter of days or weeks before, the employment action in question. Rather, the provision is intended to apply to the illegal use of drugs that has occurred recently enough to indicate that the individual is actively engaged in such conduct. (56 Fed. Reg. 35745-46.)

Fourth, if an employer erroneously excludes someone from employment on the basis of current use of illegal drugs, such an individual would be deemed a disabled individual, even though no mental or physical impairment is actually suffered. While this is consistent with the Act's inclusion in the protected class of those erroneously regarded as having such an impairment, it raises questions about the employers' reliance on the results of drug tests to make personnel decisions. The EEOC regulations state that to administer a drug test is not an ADA violation. (29 C.F.R. § 1630.3 (c)). Drug tests are also not considered medical examinations, some of which are largely curtailed under the ADA. (29 C.F.R. § 1630.16 (c)).

Lastly, it should be noted that the exclusion is for illegal drug users and does not apply to alcohol abusers. While an employer may prohibit employees from consuming or being under the influence of alcohol in the workplace and may hold alcohol abusers to the same performance and conduct standards as other employees, an employer may not take adverse action against an applicant or employee based upon alcohol abuse during off-duty hours. Moreover, where an employee's consumption of alcohol during working hours is due to the disease of alcoholism (a covered impairment), an employer may be required to provide the employee the option of attending a rehabilitation program before discharge.

F. Prohibited Conduct: What Actions are Barred?

(1) Generally:

The ADA broadly prohibits covered employers from discriminating against a qualified disabled individual in any aspect of the employment relationship. The EEOC's regulations state that this prohibition applies to:

(a) Recruitment, advertising, and job application procedures;

(b) Hiring, up-grading, promotion, award of tenure, demotion, transfer, lay-off, termination right of return from lay-off, and, rehiring;

(c) Rates of pay or any other form of compensation and changes in compensation;

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(d) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(e) Leaves of absence, sick leave, or any other leave;

(f) Fringe benefits available by virtue of employment, whether or not administered by the covered entity;

(g) Selection and financial support for training, including: apprenticeships, professional meetings, conferences and other related activities, and selection for leaves of absence to pursue training;

(h) Activities sponsored by a covered entity including social and recreational programs; and,

(i) Any other term, condition, or privilege of employment. (29 C.F.R. § 1630.4).

Certain specific types of discriminatory conduct are explicitly proscribed by regulation:

- To limit, segregate, or classify a job applicant or employee in a way that adversely affects his or her employment opportunities or status on the basis of disability. (29 C.F.R. § 1630.5);

- Participate in a contractual or other arrangement with a third party that has the effect of discriminating against the covered entity's employees or applicants (29 C.F.R. § 1630.6);

- Utilize standards, criteria or methods of administration that have the effect of discriminating on the basis of disability and which are not job related and consistent with business necessity (29 C.F.R. § 1630.7);

- Exclude or deny equal jobs or benefits to a qualified individual because he or she is known to have a family, business or social relationship with an individual who is disabled (29 C.F.R. § 1630.8);

- Fail to make reasonable accommodation to the known physical or mental limitations of an otherwise qualified applicant or employee with a disability (29 C.F.R. § 1630.9 (a)).
• Deny employment opportunities to an otherwise qualified job applicant or employee with a disability based on the need to make a reasonable accommodation to that individual's impairment (29 C.F.R. § 1630.9(b));

• Utilize qualification standards, tests or other selection criteria that have a disparate impact on the disabled and that are not justified as job related and consistent with business necessity (29 C.F.R. § 1630.10);

• Fail to select and administer employment tests in such a manner that the test results accurately reflect the skills or aptitude sought to be measured rather than the disability of the applicant (29 C.F.R. § 1630.11); or

• Retaliate against any individual because that individual has opposed any act made unlawful under the ADA or because such individual has participated in any proceedings to enforce any provision of the ADA (29 C.F.R. § 1630.12).

(2) Pre-Employment Inquiries and Medical Exams

The EEOC states that "an employer cannot inquire as to whether an individual has a disability at the pre-offer stage of the selection process," and that an employer may not "inquire at the pre-offer stage about an applicant's worker's compensation history." (56 Fed. Reg. 35750). Yet, its implementing regulations do allow an employer to "make pre-employment inquiries into the ability of an applicant to perform job-related functions, and or... ask an applicant to describe or demonstrate how, with or without reasonable accommodation, the applicant will be able to perform job-related functions." (29 C.F.R. § 1630.14). Inquiry may be made about an applicant's ability to perform both marginal and essential functions of the job. However, none of these questions may be phrased in terms of disability.

The ADA expressly prohibits an employer from conducting any medical exams prior to the time an offer of employment is extended. This includes a prohibition against the use of an application form that lists a number of potentially disabling impairments and asks the applicant to check any he or she may have. (56 Fed. Reg. 35750). While an employer may not ask an applicant how often he or she will require leave for treatment as a result of a disability, the employer may state the attendance requirements and inquire as to whether the applicant can meet them. Physical agility tests are not medical examinations and so may be given at any point in the application or employment process. But, if such a test tended to screen out individuals with a disability, the employer would have to show the test to be job-related.
The ADA does allow post-offer medical exams, and employers can condition the job offer on passing that exam, provided: (1) The employer must offer all entering employees in the same job classification the same examination; (2) The employer must place information regarding medical history in a separate, confidential file; and, (3) The employer must not use the medical information to discriminate against the applicant. Some exceptions to the confidentiality requirement exist for supervisors or managers in some cases, for first aid and safety personnel, and, of course, for government officials. (56 Fed. Reg. 35751).

An employer cannot use medical examination results to discriminate against a person with a disability if that person is still qualified for the job. However, if the employer discovers from the examination that the candidate poses a high probability of substantial harm to himself or others in performing the job, the employer may reject the candidate, unless reasonable accommodations without undue hardships could be provided. Unless an employer can prove that an exam is job-related and consistent with business necessity, the employer cannot reject an applicant based on a pre-employment medical exam.

After hire, an employer cannot require a medical examination, inquire about disabilities, or inquire about the nature and severity of a disability unless the exam or inquiry is job-related and consistent with business necessity, as in fitness for duty exams to ascertain if an employee is still able to perform the essential functions of the job. (56 Fed. Reg. 35751). An employer may inquire at any time into the employee’s ability to perform job-related functions. Voluntary medical examinations, including voluntary medical histories, as part of an employee health program, are acceptable.

G. Defenses: What Can the Employer Rely On?

There are several explicit affirmative defenses to charges of disability discrimination. Undoubtedly, employers will bear the burden of proof on these defenses. In addition, several defenses are implied. In creating them, Congress drew upon concepts and terminology that have been extensively litigated under other federal fair employment laws, particularly Title VII. These defenses will likely be used in ADA litigation in ways similar to their use under other fair employment statutes.

(1) Business Necessity in General

The ADA states:

It may be a defense to a charge of discrimination under this Act than an alleged application of qualification standards, tests, or selection criteria that screen out or tend to screen out or otherwise deny a job or benefit to an individual with a disability has been shown to be job-related and consistent with business necessity,
and such performance cannot be accomplished by reasonable accommodation, as required under this title. (Section 103 (a)).

This provision codifies the business necessity defense developed under Title VII concerning the theory of disparate impact.

(2) Qualification Standards Based Upon Safety and Health Concerns

There is a special ADA rule for employment screening devices that may have a disparate impact on the disabled where such devices are designed to assure the safety of other employees:

The term "qualification standards" may include a requirement that an individual shall not pose a direct threat to the health or safety of other individuals in the workplace. (Section 103 (b)).

Apparently, this was meant to codify Rehabilitation Act case law that permitted employers to exclude individuals from the workplace based upon the risk of future injury. The EEOC regulation (29 C.F.R. § 1630.15) is broader because it states that the threat could be to the health or safety of the individual or others. Factors to consider include: (1) The duration of the risk; (2) The nature and severity of the potential harm; (3) The likelihood that the potential harm will occur; and, (4) The imminence of the potential harm. (29 Fed. Reg. 35745).

It is clear that the employer cannot exclude an individual from the workplace because of a stereotype or speculation about the risk of harm to others. Decisions cannot be based on generalizations but, rather on the facts of an individual case. The purpose of creating the "direct threat" standard was to eliminate exclusions which are not based on objective evidence about the individual involved. A good example would be excluding an individual from a job because the employer assumes that someone with a mental disability poses a direct threat to others.

Employers must be extremely cautious when denying employment based on a risk of future injury. Employers should base decisions on careful medical examinations; studies of an individual's medical and work history, and, consideration of job duties. It should be established that a high probability of injury to the employee exists or there is substantial harm to others even after making reasonable accommodations.

While an employer can exclude an employee who poses a significant risk to others, this significant risk must be based on the current condition of the employee or applicant and there must be actual proof. Furthermore, the "direct threat" standard does not allow an employer to circumvent the prohibition against pre-employment inquiries into a person's disability. In addition, it may not be used to justify pre-employment requests or inquiries related to medical records.
Special Rules

Any employer may have "qualification standards" that exclude persons with a contagious disease or infection where that condition poses a direct threat to the health and safety of the workplace. But, the disease must pose a direct threat to the health and safety of others in the workplace which cannot be eliminated by reasonable accommodation. If an employee has an infectious disease that can be cured through medication over a period of time, the employer may be required to offer the employee time off to recover as reasonable accommodation, subject to "undue hardship" standards.

If an individual has "an infectious or communicable disease that is transmitted to others through the handling of food," the risk of which cannot be eliminated by reasonable accommodation, then the employer can "refuse to assign or continue to assign such individual to a job involving food handling." The disease must be on a list compiled by the Secretary of Health and Human Services of communicable diseases which may be transmitted through food handling.

Enforcement and Penalties: What Happens in Case of a Violation?

As stated, the EEOC, which has been enforcing Title VII and other federal employment discrimination statutes, is charged with enforcing the ADA. It has issued final regulations and interpretive guidance, much of which is cited here, and has available a Technical Assistance Manual of January 1992 as well.

The enforcement scheme is similar to that for Title VII. Employers must post appropriate notices. Aggrieved persons must file charges of discrimination with EEOC. Court-ordered remedies can include hiring, re-instatement, back pay, reasonable accommodation and other injunctive relief. Attorney's fees, litigation expenses and other costs may be awarded to prevailing claimants. Moreover, trial by jury is available and compensatory and punitive damages up to $300,000 will be available in some cases.

CONCLUSION: WHAT MORE CAN BE SAID?

If anything is clear by now, it is that the employment title of the Americans with Disabilities Act substantially expands the legal responsibility of the community of private employers in our country. Employers of all types and nearly of all sizes have to bear a very significant share of the weight of the federal legislative decision to bar private job discrimination based on non-disqualifying disabilities and to establish for the disabled truly equal employment opportunity.

Many physically disabled now take the view that their limitations are merely physical challenges. Perhaps employers can view their new ADA responsibilities not as legal limitations but, as a challenge to deal with the disabled on their own terms in the workforce and in the workplace as never before.
DISCRIMINATION AT THE ACADEMY:
THE AMERICANS WITH DISABILITIES ACT (ADA)

C. AMERICANS WITH DISABILITIES ACT
AN ADVOCACY PERSPECTIVE

John Rose, Special Advisor
for Services for the Disabled
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On July 26, 1990, the Americans with Disabilities Act became the law. For the 46 million disabled people in this country, this law has an historical perspective which is equal only to the Civil Rights Act of 1964. The ADA law has four basic provisions to it:

1. Public Accommodations

All private as well as public entities must be made fully accessible for disabled persons. These include restaurants, hotels and any other business facility that conducts business with the general public.

2. Public Transportation

All forms of transportation, both public and private, must be made fully accessible for people who are disabled. For example: All rapid rail and light rail systems must make their key stations accessible over the next 30 years. This also means after July 26, 1995, all light rail and rapid rail systems - like Amtrak - must make at least one car per train accessible to disabled persons.

3. Telecommunications

By July 26, 1993, each common carrier engaged in interstate communication by wire or radio must provide telecommunication relay services for hearing impaired and speech impaired individuals.
4. Employment

After July 26, 1995, no employer, public or private, can discriminate employment of an individual based solely on his/her disability. In addition, the prospective employer must provide reasonable accommodation to the disabled employee. This means providing telecommunications equipment for the hearing impaired, and computer equipment - including voice-activating computers for the physically impaired.

What I have given you is a brief overview of the ADA law. I would like to talk to you now as an advocate and give you an historical perspective on how we got this far and where we are going. Let me begin by introducing a friend of mine, by the name of Rita Verella, who was a young disabled woman who had cerebral palsy; unfortunately, she passed away about two years ago from cancer. Rita and I attended grade school and high school together. She then went to Bronx Community College; then on to NYU where she received her Masters Degree in Political Science. After graduating from college she began to write extensively about disabled consumer advocacy. In our many discussions, when I would ask her what she meant by consumer advocacy, she would explain that a disabled person is a consumer of goods and services the same as any other citizen but, as a disabled person, is denied the use of those services and goods simply because of the disability. And so the concept of disabled consumer advocacy was born.

Then in 1966, another lady by the name of Judy Heumann, a brilliant young woman with polio, graduated from LIU with a degree in Special Education. She wanted to teach in the New York City Public Schools System, but the Board of Education denied her a teaching position because it said her disability was a safety hazard. Well, Judy, being the aggressive person that she is, did not take "no" for an answer. She then formed an organization called Disabled in Action, made up of disabled young people who protest and fight for their rights as disabled citizens. Judy, after winning a lawsuit against the Board of Education, went on to study at Berkeley and began organizing with other Berkeley students as a group which later became known as the Independent Living Movement. It has spread all over the United States. (Berkowitz, pgs. 196-205, 207, 215, 234.)

At the same time another young friend of mine, by the name of Frank Bowe, a hearing impaired young man, took over the leadership of an organization called The Coalition for Citizens with Disabilities in Washington, D.C. He and his organization began to lobby Congress for passage of what later became the 1973 Rehabilitation Act, which called for accessibility for disabled persons in all public facilities. After the Rehabilitation Act of 1973 became law, some of us in the disabled community began to realize that this law did not go far enough because it left out a big segment of society, which is the private sector. The disabled community began to realize that if it were truly going to be mainstreamed in
society as a whole, it must be included in every aspect of society. This means the private sector, and so began the second disability movement for enactment of the ADA law. (Berkowitz, pgs. 107, 211, 214-215, 220.)

In referring to all aspects of society, let me take a few minutes to address the union leaders who are gathered here today. Unfortunately, I must tell you that the labor movement has never been a great friend to the disabled community. The labor movement did support Workman's Compensation laws back in the 1930's and the 1940's, but in terms of bringing disabled people into the labor market, unions have not done a very good job. I think that one of the main reasons for this lack of support is the misconception that the disabled workers would be taking away jobs from the rest of the labor force; in particular, those jobs in the private sector needed by union members to support their families.

Let me assure you that this is not the case. We in the disabled community do not want to take away jobs from anyone, but at the same time, we do not want to be left out of the labor market as we have been in the past. It has been proven time and time again through many studies and surveys that disabled people make good workers when they are given a job to do within their specific abilities. They do a competent job. They are effective, efficient and timely - all of the things a prospective employer would want in an employee. Disabled people do not want to be on welfare or any income maintenance programs. They want to be income earners and taxpayers like those in the rest of society.

Therefore, I think it's time that organized labor and the disabled community form a new partnership and work towards common goals that will result in a stronger and better qualified work force.

Let me turn my attention now to the college faculty administrators in the audience. Higher education has always been in the foreground of progressive ideas when it came to education for and about the disabled. When the Rehabilitation Act of 1973 became law, institutions of higher education around the country began to open their doors and make their campuses accessible to the disabled. However, in the year 1993, after ADA became the law of the land, twenty years after the Rehabilitation Act was passed, I would ask you college administrators who are gathered here today, how many faculty and staff do you have on our campuses who are disabled? How many teachers, professors, student advisors or counselors? Those of you who have special programs geared to meet the needs of your disabled students: Are those programs under the directorship of a qualified disabled person or, as in most cases, a person who may have some professional background with the disabled, but not him/herself a disabled person?

Many of you may ask why I raised this issue, but to me, this is the key point in the future of the disabled community. Disabled people must have the right to be in control of their own future.
Let me give you an analogy. If you have an Afro-American cultural student program on your campus or an Hispanic cultural student program, or one for any other minority group, I am sure that you will hire a qualified representative of that particular group to run that particular program. Why, then, would you assume that someone who is not himself/herself disabled would be qualified to assist disabled students?

I am reminded of a cartoon I saw in a magazine some years ago in which a disabled person in a wheelchair was sitting in front of an office of rehabilitation services which had many steps. And there were two counselors talking, and the caption was saying, "What does he know about it! He's just handicapped!"

I am sure my point here is obvious. He does know all about it because he is disabled. I would sincerely ask all college administrators when you go back to your respective campuses to take a good hard look at your programs for disabled students and see if those students would not be better served by a qualified disabled person as a member of your faculty.

In closing, let me draw an analogy from history to show where we go in the future. I am sure that many of you watched, as I did a couple of years ago on Public Television, "Masterpiece Theatre", when it showed the memorable production of I. Claudius. One does not fully realize the impact of this drama until one reads the two volumes of this historical novel, as I did, and you will quickly realize that the main character is a severely disabled person. Claudius was so disabled from paralysis since birth that he walked with a severe limp and his speech was afflicted by a severe stutter. His own mother rejected him and refused to allow him to eat at the same table with the rest of the family, yet the man's intellect prevailed. He became one of the greatest historians of the Roman Empire. When he was finally chosen to become one of the last in a long succession of Roman Emperors, his competency and capability prevailed.

One of his many accomplishments as Emperor was the building of a great irrigating system. He also built a great harbor and port structure, which was an architectural monument of his time. He also modernized the legal system, creating local hearing tribunals that would hear grievances within the community. In his personal life, he married at least three times and had many mistresses; fathering many children.

Let us remember that Tiberius Claudius was born in the year 10 B.C. and died in the year 54 A.D. (Graves, pp. 53-54, 107, 115, 167-179.) Surely in the twenty-first Century the disabled community cannot expect any less, and with the passage of the ADA disabled people will achieve accomplishments far beyond society's wildest imagination. With your support, our dream of total equality will become a true reality.
DISCRIMINATION AT THE ACADEMY:  
THE AMERICANS WITH DISABILITIES ACT (ADA)

D. COMPLYING WITH THE PROVISIONS OF THE
AMERICANS WITH DISABILITIES ACT

John Sorrenti
JRS Architect, PC

On July 26, 1990, President Bush signed the ADA into law and made the first part of the Act compensatory as of January 26, 1992.

The ADA went beyond Title VII of the Civil Rights Act of 1964 and almost all state laws concerning access to public and private spaces.

The law addresses the physically challenged: Those with impaired ability to use the goods, services and spaces that all Americans have a right to enjoy. There are approximately 43 million people in the United States that are considered physically challenged. The intent of the law, as Congress saw it, was to put all Americans on an equal playing field and was not intended to create a burden for anyone or any corporation. For this reason, the law was drafted so that, although stringent in its guidelines and enforcement, it left a variety of ways to accomplish its goals, which I speak about later.

The law contains four (4) categories:

- **Title I** - Deals with Employers
- **Title II** - Deals with Transportation and its Ancillary Facilities
- **Title III** - Deals with Places of Public Accommodations
- **Title IV** - Deals with Communications

The ADA, unlike other Local Codes such as ANSI 117.1, takes into account not only the wheelchair-bound person but also the sight impaired, hearing impaired and slightly mentally impaired person, persons over the age of 70, epileptics, people recovering from substance abuse, and those people with life-threatening illnesses such as cancer, heart problems, kidney problems, AIDS, etc. [In short, any limitation of a major life activity such as walking, hearing, seeing, breathing, etc., constitutes a disability.]
Although facilities managers, architects and those who are responsible for the built environment mainly deal with Titles I and III, it is important for all to understand all four Titles so that intelligent choices can be made concerning the different Titles, since they can and often do interact with each other.

Critical dates are January 26th or July 26th of 1992, 1993 or 1994. The dates of the Act's provisions are as follows:

For existing facilities: Title III: Public Accommodations, January 26, 1992.

For existing facilities: Title I: Employees (25+)
Accommodations, July 26, 1992

For new construction: Title III: Public Accommodations, January 26, 1993

For existing facilities: Title I: Employees (25 or less) July 26, 1994

The government in its efforts to help make the law more applicable has defined adherence to ADA requirements in Readily Achievable Standards. This means that you must comply with ADA if it is readily achievable; not to place an undue burden on any company. Readily Standards has been defined as not costing more than 20% of the overall construction cost of the project.

In order to formulate what is readily achievable, an action plan is needed, since "readily achievable" is different for every company. An ADA team is the first step in formulating an action plan.

The ADA team should consist of the following people:

A. Facilities Person
B. Human Resources Person
C. An Architect
D. An Accountant
E. An Attorney

The reasons for these suggested representatives is that the facilities person and architect can work together to define the barriers. The human resources person helps to disseminate the information to the workforce, and also can modify job descriptions as may be required to help a company meet its ADA obligation. The accountant and the attorney must define for the corporation, what is "readily achievable" for that particular company.

The Action Plan should consist of:

A. Barrier Removal
B. Review of those items that will be considered "readily achieved."
C. Develop an implementation program schedule (discuss what we have done)
D. The plan should be structured to address Readily Achievable Barrier Removal for several years to come. (i.e.: what may not be readily achievable in Fiscal '92 or '93 may be in '94 or '95. This Act is not a one-shot deal - it's for the long term.)

When the team has ascertained what the problems are for that company, the Architect, under the direction of the Facilities Manager, will prepare an audit of the facility which will define all of the barriers to be removed. The Architect will also prepare a cost estimate related to each item to be removed. Once the audit is complete, the ADA team will determine how much of the work can be done immediately (by the readily achievable "Standards") and then will complete the work. The ADA team will then set an Action Plan and schedule when all remaining barriers can be readily removed. The plan must be strictly adhered to if the requirements set down by the law are to be met.

As you can see, the ADA barrier removal is not, and should not, be thought of as a one step deal. Rather, it is a continuous process toward eliminating all barriers with the confines of all structures. The plan should be structured to address readily achievable barrier removal for several years to come (i.e. what may not be readily achievable in fiscal '92 or '93 may be readily achievable in fiscal '94 or '95).

How to Comply

Compliance is a lot easier than most people think. The government is not trying to inflict a heavy burden on anyone, but rather is only trying to get all those who are physically challenged and those who are not on the same playing field.

For existing facilities, an "Action Plan" for Readily Achievable Architectural and Communication Barrier Removal should, for the most part, already be in place. (January 26, 1992)

There are four priorities for Barrier Removal:

1. Getting through the door
2. Access to goods and services
3. Access to restrooms and water coolers (if provided)
4. Removal of remaining barriers

The following are 21 Readily Achievable Barrier removals, from the Justice Department:

1. Installing ramps
2. Making curb cuts in sidewalks and entrances
3. Repositioning shelves
4. Re-arranging tables, chairs, vending machines, display racks, and other furniture.
5. Repositioning telephones
6. Adding raised markings on elevator control buttons
7. Installing flashing alarm lights
8. Widening doors
9. Offset hinges to widen doorways
10. Eliminating a turnstile or providing an alternative accessible path
11. Accessible door hardware
12. Grab bars in toilet stalls
13. Rearranging toilet partitions to increase maneuvering space
14. Insulating lavatory pipes under sinks to prevent burns
15. A raised toilet seat
16. A full-length bathroom mirror
17. Repositioning the paper towel dispenser in a bathroom
18. Creating designated accessible parking spaces
19. An accessible paper cup dispenser at an existing inaccessible water fountain
20. Removing high-pile, low-density carpeting
21. Vehicle hand controls

Risks and Benefits of Compliance

The Justice Department will monitor Title III - Public Accommodations. The EEOC will monitor Title I - Employment Accommodations.

Enforcement of the law will be on a compliant basis. Any company denying public access to a disabled person is liable under the law as follows:

Any company with 25 or more employed: The employer can be sued immediately by an employee who feels he or she has been denied access.

Any company with 25 or less people: The employer cannot be sued for six months after the law goes into effect on July 26, 1994.

Since the government will take notice of a good faith effort, an action plan and implementation plan is important. Fines can be as high as $50,000 for the first violation and up to $100,000 for each additional violation, and punitive damages up to $300,000. Punitive damages are not available in claims against any public entity.

The IRS has included a tax incentives section into the Act to help companies comply. For large companies (over one million dollars in gross revenue), it is up to a $15,000/year tax deduction. This means that up to $15,000 a year can be deducted from the tax of a corporation for expenses related to the removal of barriers. For smaller companies of $1,000,000 or less per year in gross revenue, there is also a tax credit of up to $10,250/year. This means that a company can get a tax credit equal to 50% a year of what they have spent related to the removal of barriers up to $10,250.

When former President George Bush said that the ADA would have a "broad and powerful action," he was absolutely right. The complex issues have focused the collective forces
of many diverse business special interest groups and professionals to provide access for the disabled.

These programs for compliance need not be complex or unmanageable. We need carefully to enlist all of the our resources in order systematically to achieve barrier-free accessibility for all Americans.
DISCRIMINATION AT THE ACADEMY: PAY EQUITY

E. A STUDY OF EQUAL PAY FOR FACULTY AT TWENTY-NINE SUNY INSTITUTIONS
LABOR/MANAGEMENT NEGOTIATION, AGGRAVATION, EXPERIMENTATION, AND IMPLEMENTATION

Lois Haignere
Director of Research
United University Professions

INTRODUCTION

The 1985-88 collective agreement between the State University of New York (SUNY) and the University Professions (UUP) established a pool of money to address gender and race salary disparities and set up a SUNY-UUP labor-management committee to negotiate how salaries would be reviewed for these disparities and, by extension, how and to whom the money would be allocated. As you might suspect, jointly negotiating the complex political and methodological decisions involved was a long process, taking over five years from January of 1988 to March of 1993. As the subtitle of this paper indicates, the process of jointly designing and conducting such research was both frustrating and rewarding.

In this report I provide some of the details concerning the major political and methodological decisions that resulted from the union/management committee process as well as the primary results concerning faculty salary disparities. The reader should note that this report is solely from the perspective of one person involved in the process. As Director of the UUP Research Department, I participated as a staff member for the union in the Labor/Management Committee process. My major purpose in providing this overview is to pass on the lessons we learned about the design of such research, rather than to provide insight into the labor/management negotiation process. We jointly studied and assessed different ways of estimating salary disparities. Even though your system may not be as large and diverse as SUNY, understanding the complexities we faced and the resulting decisions may assist you in attempting similar assessments.

In the next section of this report I briefly describe the SUNY/UUP institutions and the populations of faculty that we
The third section summarizes the primary political and technical decisions made by the joint labor/management salary disparity committee (henceforth called the Disparity Committee.) In the results section, I present the overview of the finding of each of our twenty-nine faculty analyses. The concluding section summarizes the aftermath concerns to date as they have been experienced by the union side.

SUNY/UUP INSTITUTIONS

The State University of New York (SUNY) institutions for which the United University Professions (UUP) serves as a bargaining agent consists of twenty-nine campuses and the SUNY Central Administrative Offices. Among these institutions there are four major universities located in Albany, Binghamton, Buffalo and Stony Brook. These universities award undergraduate degrees and the full range of graduate degrees including the Ph.D. The Universities at Buffalo and Stony Brook also have Health Science Centers (HSC's) which provide training in medicine and other health professions. There are two other HSC's in the SUNY system, one in Syracuse (Upstate Medical) and one in Brooklyn (Downstate Medical).

In addition, the SUNY/UUP bargaining unit includes thirteen colleges of arts and sciences. Twelve of these, like the universities and HSC's, are named in reference to their locations and are located in Brockport, Buffalo, Cortland, Fredonia, Geneseo, Old Westbury, New Paltz, Oneonta, Oswego, Plattsburgh, Potsdam and Purchase. The thirteenth is Empire State College, which has several locations throughout the state with central offices in Saratoga. While some of these institutions provide graduate education, their primary focus is four-year undergraduate education.

Six SUNY/UUP technical colleges are located in Alfred, Canton, Cobleskill, Delhi, Farmingdale, and Morrisville. These schools focus on two-year programs ending in associate degrees, although some offer four-year programs which award bachelors degrees.

The four remaining schools are specialized colleges: Utica/Rome, Forestry, Maritime, and Optometry. Utica/Rome is a two-year school, but instead of providing the first two years of higher education it provides the last two years, i.e., the junior and senior years. Forestry, Maritime and Optometry provide specialized education in the areas indicated by their names.

The faculties at these institutions include librarians who fall into four ranks: assistant librarian, senior assistant librarian, associate librarian, and librarian. There are six non-librarian faculty ranks: instructor, lecturer, assistant professor, associate professor, professor and leading professor. With the exception of lecturer all of these academic ranks are tenure-track.

In summary, the UUP faculty bargaining unit members at SUNY institutions constitute a diverse population. They reflect the diversity of the institutions in which they are studied.
employed. Some are employed at schools teaching diesel technology, welding, data processing, mortuary science, dental hygiene, and saddle-horse production. Others are employed at schools teaching medicine, dentistry, and law. Some are employed at small schools with faculties of less than sixty people. Others are at large schools with more than six hundred faculty members. This diversity has implications for the methods used in this study.

HELP FROM THE LITERATURE

Realizing the potential for gender bias in their faculty salaries, many institutions of higher education have done studies examining whether or not there are systematic salary differences indicating discrimination against women as a class. These studies are commonly conducted using multiple regression analysis with salary as the dependent variable. Among other sites, such studies have been conducted at the University of Illinois at Urbana-Champaign; the University of Rhode Island; the Memorial University of Newfoundland; Queens University; the University of Western Ontario; the University of Maryland at College Park; Kansas State University, and the University of Nebraska at Omaha. The University of Wisconsin at Madison is currently conducting such an analysis. For more specific information on these studies and the methodological approach, see J. Allen 1984; Geetter, 1988; Gray 1990; Gray and Scott 1980; Johnson, McLaughlin, Zirkes and Saban 1983; Ramsey 1979; Schau and Heyward 1987; Schrank 1977, 1984, 1988; Schau and Heyward 1987; Schrank 1977, 1984, 1988; and Scott 1977; Muffo, Braskamp, Langston 1979; Brittingham and Pezzullo et. al., 1979; Hurley and Rodney et. al., 1982; and Finkler et. al., 1990.

Given this wealth of literature and previous studies concerning faculty salary equity, the Disparity Committee had a great deal of information to assist it in designing the faculty analysis and in selecting an approach to correcting any inequities found. From the start, both union and management choose to follow the multiple regression statistical technique widely recommended in the literature concerning the assessment of salary disparities. For those interested in understanding more of the specifics of this analytical approach I have attached Appendix A, which provides an introduction to multiple regression as it is used to study equity in salaries. Recognizing that the audience has a wide range of mathematical knowledge, I have attempted to make it understandable to all. The uninitiated may want to read it before reading further. Along with Appendix B, it may prove helpful in understanding why we selected certain methods and our approach to the distribution of awards.

INITIAL DECISIONS -- WHO AND HOW

Having made the decision to use the multiple regression statistical technique recommended in the literature, we were still left with two decisions to be made before data collection could begin. These were who to study, i.e., which faculty members' salaries to include, and which variables to use to study salary disparities.
A. Defining the Population

The decisions concerning who to include in the analysis involved consideration of those paid by clinical practice plans, part-time faculty, medical residences and non-tenure track faculty. The Disparity Committee jointly agreed that it would be impossible to study those for whom accurate salary and career information could not be obtained. Thus, it was necessary to exclude those paid by clinical practice plans and those who are geographically full-time (GFT) because their salary information was paid by diverse institutions and difficult, if not impossible, to obtain. Similarly, part-time faculty members were excluded due to a high turnover that precluded getting an accurate data base. Medical residents were also excluded from the study because of their fixed salary scale.

We decided to include non-tenure track full-time faculty, e.g., lecturers, since women and minorities are disproportionately in non-tenure track lines and there are no barriers to obtaining accurate data regarding these full-time employees.

Management suggested that librarians be either excluded from the study or analyzed separately. However, librarians were included as part of the main analysis with their ranks as dummy variables.

B. Defining the Variables

In conducting the regression analysis, the Disparity Committee decided to control for the most readily known, career-salient, characteristics. These included rank, initial rank, discipline, highest degree, years since highest degree, years of experience at the institution (full and part-time), years of experience prior to this institution, years in rank, age, previous administrative experience, current administrative position; currently department chair, etc. A detailed list of the variables appears in Appendix C.

This list of variables can be attacked from both the left and the right. The left would argue that it includes variables it should not, and the right would argue it leaves out variables it should include. The left would want to remove variables such as rank that could mask gender and race effects. The right would want to add "productivity" variables such as the amount of research, publishing and quality of teaching. While we were generally aware of these arguments and each side did some initial posturing regarding them, it is important to note that the primary determinant of the variables we used was pragmatic. We wanted as many salary relevant variables as feasible so as to account for as much variance in salaries as possible while recognizing the limitations involving the time, energy and good will of the personnel offices at each campus. Thus, the data to be used in the analyses were based on maximizing the salary relevant variables that we could logically expect the personnel office at each campus to provide in a reasonable period of time.
POST-PRELIMINARY ANALYSES DECISIONS

Once the initial decisions concerning the population to be examined and the data to be collected had been made, the long process of data collection could begin. The decisions described in this section were all made subsequent to looking at some of the preliminary data, but before all the final data collection was completed. In my view, this was important because many of the issues that we may have struggled over at length, became easier to agree upon once we were aware of the difficulties inherent in certain decisions and their relative statistical impact.

Delaying some methodological decisions until after preliminary analyses and thereby decreasing the subjectivity of the discussion may not have been possible if the data had not been available to and analyzed by both union and management researchers. Had management been unilaterally doing the analyses, the union, in all likelihood, would have wanted to negotiate all of the issues before the data was available, so management could not change its position subsequent to seeing the outcome. In addition, the union may have had difficulty trusting the results had the analyses been unilaterally done by management. Instead, both the UUP researchers and the SUNY Central Administration researchers were doing the same analyses at roughly the same points in time. They were in frequent contact, and when rare inconsistencies occurred in their findings, they would sort out why and make the necessary corrections for consistent findings. While there were minor disagreements in interpreting the findings, and even an unresolved methodological issue or two, in the vast majority of cases the two primary researchers agreed. Thus, the time taken in political debates over methods was greatly reduced.

Below I discuss the four major decisions that were made subsequent to preliminary results. These include the decision to conduct the analyses at the campus level; the decision to base the awards on gender/race group averages; the decisions concerning how to group minority women; and the classic debate over how much of the funds should be awarded through the discretion of management as opposed to being awarded based on the statistical analyses.

THE DECISION THAT ANALYSES BE DONE AT THE CAMPUS LEVEL

Although the central SUNY administration exercises authority over the general levels of salaries, each of the twenty-nine separate institutional sites described above controls the specifics of hiring and salary assignment at that institution. This decentralization is practical, given the diversity of these institutions, their geographic locations, and an emphasis on institutional autonomy which is staunchly defended in the name of academic freedom. In light of this decentralization of hiring and salary assignment, the Disparity Committee decided to conduct separate multiple regression analyses for the faculty at each SUNY/UUP institution.
Thus, we conducted these analyses at the level at which most salary assignment decisions are made. If we had conducted a single analysis at the total SUNY level or institutional type analyses (e.g., combing all universities into one analysis, all the technical schools into one analysis, all the four-year colleges into one analysis, etc.), a school with no race and gender salary disparity could mask such disparities at another institution.

THE EVOLVING DECISIONS TO BASE AWARDS ON GENDER AND RACE GROUP AVERAGES

It was initially assumed by both the union and management that salary adjustments would be individually determined and increases awarded to those whose predicted salaries were higher than their actual salaries by some predetermined amount or proportion. We persisted for some time in trying to overcome the problems associated with this approach.

The first problem we discovered was in relation to the cutoff to be used to decide who will get a salary increase and who will not. If you choose only those whose residuals are more than two standard deviations from the average or a fixed amount of money, full professors, those in higher paid disciplines, those with more years of experience, etc., have more chance of being underpaid by this amount by the sheer size of their salaries than lower paid academics. We proposed to solve this problem by using a certain proportion of an individual's actual salary as the determinant of who would get an award and who would not.

The question that began to haunt us was: What level of accuracy of data was needed if you are going to give money to one woman and not another, or to one African-American man and not another, or to several white women but only one Latino male?

This is not to say that we are greatly concerned about the general accuracy of our data base. The SUNY Central Administration Office of Employee Relations and Personnel Operations coordinated the collection of the appropriate data from each of the individual campus Employee Relations and/or Personnel Offices. The UUP Research Department screened all of the incoming data with a specially designed computer program which would flag missing data and data inconsistency problems. Among others, these data inconsistency problems included people who got degrees before they were born; people with years of experience indicating they started acquiring relevant work experience before the age of seven; people with more years in rank than they have been at the institution; people making salaries under the contractual minimum for their rank, etc.

We sent repeated reports noting problems with the data to each campus. In all cases we persisted until we had complete data that appeared, on its face, to be accurate. However, at bottom, the actual accuracy of the data from each institution was the responsibility of that institution. Clearly, some of the offices and individuals providing the data were more careful than others. We even found that one "creative" data
provider responded to our disallowance of missing data codes for "Experience Prior to This Institution" by entering all zeros. Since zero was an allowable code, this trick neatly circumvented our screening program and had to be caught by a suspicious researcher.

So, given the magnitude of our undertaking, we are generally proud of the quality of our data. But that is not to say that we believe it is accurate enough to estimate individual level salary disparities. In order to make individual level awards, we believe we would need to verify the information in our data bank with, at least, every individual women and minority male. Since the white males would not get awards and, on the group level, it is highly likely that errors are random and would balance each other out, it would not have been necessary to validate the white male data. However, for those who were actually going to receive or be ruled out of a salary increment, we believe it would be necessary to validate all their information. If an individual receiving a salary increase had fewer years of experience than our data indicated or less administrative experience, then we might be in a position of taking that person's award away and giving it to a person whom our data said had fewer years of experience than s/he actually had. If we had to validate the data of every individual woman and minority male, we believe we would be still doing this study in the twenty-first century.

Given this unrealistic timeline, at the suggestion of the SUNY Central researcher, Gary Blose, we considered a group approach to awards, similar to the one taken by the University of Connecticut. Such an approach assumes that, by and large, the effect of gender and race categories on salaries is systematic affecting all those in that gender and race category at institutions. In other words, the undervaluing of workers based on gender and race, affects the "super stars" as well as the "duds" as well as the average performer. Any remedy should address the impact on the entire class.

In fact, an emphasis on group or class differences rather than individual differences is a more appropriate use of the multiple regression statistical approach. As I have indicated in Appendix A, this statistical technique results in output which, like averages, indicates class, not individual differences.

For instance, if the regression equation indicates that women faculty members receive $1,200 less per year than white men faculty members after controlling for rank, discipline, years of service and all of the other variables included in our models, this is similar to saying that on average women faculty are paid $1,200 less than comparable men faculty. This does not mean that there are not faculty women who are paid above the average for comparable men. Neither does it mean that there are not white men paid less than any women or minorities. But it does mean that it is less likely that white men make less than comparable women and minorities, and that it is less likely that women and minorities make more than comparable white men.
Another way of conceptualizing group as opposed to individual approach, is that the normal curve for the salary residuals (the difference between actual and predicted salaries) of women and minorities will be more similar to the normal curve for white men. The highest paid women and minorities will now have salaries more like the highest paid white males, and the lowest paid women and minorities will now have salaries more like the lowest paid white males. If the total negative coefficient were paid to each women or minority in the group, then the mean of the two residual curves would be essentially the same.

In other words, if we raised the salaries of all those in the category by the total amount of their negative coefficient, we would move the line to the line leaving the scatter around the line so that relatively equal proportions of the white male scatter and the minority and the women's scatter would be above and below that line.

We concluded that the use of group rather than individual disparities provided the best guess of what the salaries of women and minorities would have been if sexism and racism did not exist in our society and by extension our salary assigning processes. Thus, we decided to give all of those in the gender and minority categories that were found to have a negative coefficient the same award based on the amount of negotiated money available.

Although there was consensus that group awards constitute our best guess concerning salary disparities, there was a residue of concern for individual women and minority men that were very low outliers. To address these concerns it was agreed that a list of those whose residuals were more than one and a half standard deviations below the mean would be submitted to each institution for special consideration for discretionary awards.

WHAT TO DO ABOUT MINORITY MEN AND WOMEN

Minority women initially were a concern to management because management indicated they did not want "double dipping." That is, management did not want individual women getting one award based on gender and another based on race. UUP's concern was that, if we assessed each minority woman's category separately, this would mean that on some campuses white women would be found to be disparate but one or more minority women categories would not be found to be disparate. Preliminary analyses showed this to be the case. We believed we could best assure that most minority women received awards if we treated them as women rather than in their race or race/gender category.

The parallel question for minority males was whether to treat them as one group or in their separate race categories. We reasoned that some race categories, such as Asian males, would be likely to be overpaid and could mask discrimination against other male race categories. Thus, with objective of maximizing those eligible for awards, we arrived at a different approach for minority men. That is, we believed we could best assure that the most minority men received awards
if we treated them in their separate race categories rather than lumping them all together as minority men. Thus, this study examines disparities for men in four different race categories: African American, Latino, Asian and Native American.

THE CLASSIC STRUGGLE OVER THE AMOUNT TO BE AWARDED AS DISCRETIONARY

It will come as a surprise to no one that it was much easier to make methodological decisions than it was to get consensus on the political ones. Despite the extensive research being designed by the Labor/Management Committee, management initially proposed that the bulk of the award be discretionary, i.e., awarded to women and minority individuals selected by campus level management.

That, of course, was unacceptable to those of us on the union side of the table. We were quick to point out that if discretionary awards would solve the problems of gender and race salary disparities, our regression analyses should show that there were none, since management had had many previous discretionary award opportunities to eliminate these problems.

To make a very long story short, in the end we agreed to 20% of the allocated monies being awarded based on management discretion. There was no limit on the amount that could be awarded, but awards could only go to individuals in the women or minority male categories that had been found by the regression analysis to be disparate at that institution. In other words, if an individual's name did not appear on the roster to receive a formulaic award, he or she could not be given a discretionary award.

VI. RESULTS

The gender and race results of the regression analyses of variations in full-time faculty salaries at the 29 different SUNY/UUP campuses are provided in Table 1. The second column indicates the adjusted R² for the analysis for each campus.

As we have indicated in Appendix A, the R² is important in judging the validity of different regression equations. It indicates the percent of the variation in salary explained by the variables in the equation. An R² above .7 is considered a strong association, meaning that most of the variations in the dependent variable have been accounted for by the independent or predictor variables.

All of these adjusted R²s are well above the .7 level with the lowest being .76 for the Brooklyn Health Science Center. The highest R² is .91 at Cobleskill demonstrating that only 9% of the variation in Cobleskill faculty salaries is left unexplained by the variables included in the model. The adjusted R-squares of these analyses document that the variables in these equations are explaining most of the variation in the salaries of SUNY/UUP faculty members at these institutions.
The rest of Table 1 indicates the results of our disparity studies. Thus, there are five major columns, one for the females and one for each of the four male minority groups, respectively. Each of these columns has three sub-columns. The first sub-column reports the negative regression coefficient for each campus for the female or minority male category referred to by that column. As we explained in Appendix A, this negative coefficient is our best estimate of how much, on average, it costs a faculty person to be a woman or a minority, assuming that all the other variables in the equation are held constant.

The second sub-column displays the total number of full-time faculty in our data in each gender/minority male category at each campus. The third sub-column indicates the formulaic salary increase awarded to each individual female and minority male faculty member at each campus based on the regression coefficient and the contractually negotiated amount of dollars available. This amount is about 23 or 24% of the total negative coefficients.

Turning to the general findings: of the 7,866 faculty persons studied, 2,807 or 35.7% were women or minority men. Of these 2,807 women and minorities, 75% or 2,099 were found to be eligible for disparity awards. Table 1 indicates that female faculty members have a substantial negative regression coefficient at most campuses. The seven exceptions are the University at Binghamton; Brooklyn Health Science Center; the colleges at Cortland, Old Westbury, Cobleskill and Maritime and Optometry. At these schools a positive or zero coefficient for the variable Female indicates that being a woman does not, on average, decrease a faculty person's salary. At the remaining campuses, being a female negatively impacts faculty salaries, although at a few of the four-year colleges, these impacts are relatively low.

African American Male faculty are found to have negative coefficients at the Universities at Albany, Buffalo and Stony Brook, the Syracuse Health Science Center and the colleges at Farmingdale and Utica/Rome.

Latino Male faculty are found to have negative coefficients at thirteen institutions -- Syracuse Health Science Center, Farmingdale and Utica/Rome; seven of the thirteen colleges, and at Forestry, Maritime and Morrisville.

Asian Male faculty are found to have negative coefficients at fourteen institutions -- The University at Stony Brook, Brooklyn and Syracuse Health Science Centers, and seven of the thirteen colleges, as well as Alfred, Farmingdale, Forestry and Utica/Rome.

There are only eight Native American Male faculty at these SUNY institutions. Only the two at Oswego are found to have a negative coefficient.

V. AFTERMATH: A VIEW FROM THE UNION SIDE

So, what kind of flack have we taken after the fact? As sure as I say things have been relatively calm, the storm will
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* This figure is under contention between UUP and Management.
hit. So, I won't say that. Instead, I will just review some of the major concerns that have surfaced to date.

A. Some Reactions to the Campus-by-Campus Group Level Flat Awards

Clearly, the normative perception of how the women and minority disparities would be determined was that they would be based on a individual level analysis approach. We have heard from individuals at a couple of institutions who clearly believe that they are much more disparate on an individual level than is their group. We have also had one chapter president complain about giving increases to very highly paid minorities. He was particularly concerned that an award had gone to one highly paid male Asian. Women on campuses that show little or no salary disparities for women have indicated that they do not believe things are all that equitable at their institutions. Nevertheless, these people have, in general, conceded that the salaries of women faculty on other campuses are probably a lot more disparate.

Besides avoiding the necessity to validate all the minorities' and women's data, one of the perceived advantages of flat awards based on group disparities was that this approach would greatly decrease any perceived need to consider the productivity-related measures such as, research, teaching and publications. The factors that can make a significant difference in individual salaries may not be important were the focus is on group differences. To show that some women are less qualified or productive than some men would not refute findings concerning group differences. Instead, it would be necessary to show that the females or minority males, as a group, are less qualified or productive than the white males, as a group.

Indeed, from the union side of the "Why did you do it this way?" complaint process, we have not received any questions concerning why we did not include performance-related variables. However, it is probably much more likely that SUNY Central would receive such complaints from institutional managers who would like to believe that such variables would explain away the salary disparities indicated by the analyses.

B. Why Weren't Minority Women Treated in Both Their Race and Gender Categories?

Naturally, many minority women are interested to know whether or not they experience more or less disparity as a group than white women do as a group. To date our only response to this interest is to run that analysis for the Buffalo State College union representatives on the labor/management committee I mentioned earlier.

C. What About the Remaining Salary Disparity?

Not surprisingly, we have received many questions about the approximately 75% of the salary disparities found by our study that were not covered by the amount of money available from the pool negotiated in the 1985 contract. The most
encouraging result we have seen to date is that at the State University College at Buffalo, a joint labor/management committee has been created to address the remaining disparities and other minority and women's issues. We would hope that other institutions with substantial salary disparities would begin to systematically address these disparities through a labor/management process. UUP Central will be carefully monitoring these chapter/campus level correction processes so as to assess what additional disparities need to be addressed in future labor/management negotiations.

One reflection of the degree to which local campus managers are serious about eliminating gender and race salary disparities is the seriousness with which they consider making discretionary awards to individuals who were found to be extreme outliers.

As I indicated earlier, a list of those whose residuals were more than one and a half standard deviations below the mean was submitted to each institution for special consideration for discretionary awards. 22 of our 29 institutions had eligible outliers beyond one and a half standard deviations. Of these, more than half - twelve schools - gave discretionary awards to all of their eligible outliers. Three more schools gave discretionary awards to more than 60% of their eligible outliers. Thus, 68% (15) of the schools with eligible outliers gave additional discretionary awards to a substantial portion of their outliers. In our opinion, this response indicates a responsible concern for salary equity. On the other hand, four schools gave discretionary awards to less than half of their eligible outliers. These were Albany, Brockport, Empire State and Oswego. Two schools, Buffalo College and Purchase, appear to have totally ignored their outlier list in giving discretionary awards.

TO CONCLUDE

It is appropriate to end this report by commending those schools that have shown that it is possible to administer faculty salaries with equity across gender and race categories. Binghamton has done very well, with Cortland, Old Westbury, Cobleskill, Maritime and Optometry also deserving congratulations. Perhaps these institutions can assist those that have not done so well to improve their salary assignment processes.
ACKNOWLEDGEMENTS

We wish to express our deepest gratitude to Sam Livingston, UUP Staff Director, for consistently facilitating the necessary communication links with SUNY Central, helping us to keep the delays and set-backs in context and providing much needed information and advice on many topics. Throughout our four years of working together, he was always supportive, helpful and collegial.

Many other people helped to make this study possible. These people include the SUNY Central employees who were crucial to the collection of accurate data and the analysis of that data, particularly Joyce Villa, Kathie Stallmer and Juan Jarret and Gary Blose. Dr. Blose also reviewed and provided very helpful comments on this paper. In addition, we thank the unnamed people at each institution's Human Resources/Personnel Office that responded to our many requests for data corrections.

Finally, it is important to note that this study and the resulting salary awards would not have been possible without the efforts of the many people who are concerned about salary equity and, therefore, actively worked to negotiate the contractual agreements that led to this study. Most notably, these include: John M. Reilly; Nuala Drescher; Harold Cannon; John Hunt; Rita Piccolo and Samuel von Winbush. However, there are many other UUP officials and members too numerous to mention by name, whose active support of this issue helped to make this study possible.

APPENDIX A
USING MULTIPLE REGRESSION TO STUDY GENDER EQUITY IN SALARIES

In this appendix, I provide an introduction to the interpretation of regression statistics in the context of salary equity studies. Recognizing that it will be distributed to an audience with a wide range of mathematical knowledge we have attempted to make it understandable.

To begin with a very simple example, assume that we are interested in finding out how some variables relate to body weight. These variables are shoe size, hours of exercise per week, eye color, fast food meals, height, and make of automobile. If we had a sample of individual body weights and we regressed the above-mentioned variables against them, we would expect some of these characteristics to be more related to body weight than others. For instance, we would probably find that make of automobile and eye color had no relationship to body weight. The amount of exercise per week might be negatively related to body weight; i.e., as it goes up, body weight goes down. Height, shoe size and fast food meals might be positively related to body weight; i.e., as they go up, body weight goes up. Among these positively related variables we would probably find that height is more strongly related than shoe size and fast food meals.

The particular strength of multiple regression is that it can isolate the effect of one of these variables while
controlling for all of the others. In other words, it can statistically control for height, shoe size and fast food meals while examining the impact of hours of exercise per week. Conceptually, we can compare a group of people of exactly the same height, wearing the same sized shoes and eating the same number of fast food meals per week, who vary only in their amount of exercise.

Rather than body weight, we are interested in explaining variations in higher education faculty salaries, and in estimating the effect of gender while controlling for other important salary-related variables, like Years of Service and Discipline.

In order to explain how multiple regression works, we begin by considering an example of how just one variable, Years of Service, explains variations in salaries. If we plot the Years of Service to SUNY against Salaries, we would probably see a scatter plot similar to Figure 1, although this Figure was generated using data from a non-SUNY school.

From even a casual glance at Figure 1 it is evident that Salary increases as Years of Service increases. Note, however, that the relationship is not perfect: Every increase in Years of Service does not result in an equal increase in Salary. If the relationship were perfect, all points would fall on a straight line.

To statistically describe this relationship, we could provide an equation that would estimate how large a difference in Salary we would expect, on average, for individuals who differ by one year in Years of Service. This is done by fitting these points with the "line of best fit" (Figure 2). "Best fit" refers to a statistical criterion, indicating that the line minimizes the distances between the line and the points scattered around it. In other words, the line is as close to all points as a straight line can be. The slope or steepness of this line indicates the predicted change in Salary for a unit change (one year) in Years of Service.

For instance, if we draw a straight line up from five Years of Service on the horizontal axis of Figure 2 until we reach the line of best fit and then draw a line over to the vertical axis, we will find the average predicted salary for faculty members with five years of service.

But we do not have to have a graph or line of best fit in front of us to be able to predict the salary of those with five years of service. Regression analysis provides us with a formula representing the straight line on Figure 2. This line can be described by just two pieces of information:

1. The place the line starts on the vertical axis, i.e., the intercept; and
2. The slope of the line, i.e., the average increase in Salary for one unit of increase in Years of Service.
FIGURE 1.
PLOT: SALARY BY YEARS OF SERVICE

FIGURE 2.
PLOT: SALARY BY YEARS OF SERVICE
This formula is Predicted Salary = intercept point + slope of the line * Years of Service. This is the same as the formula we learned for a straight line in basic algebra, \( Y = a + b \times X \). Where \( Y \) is the predicted value (Salary); \( a \) is the intercept, \( b \) is the slope of the line and \( X \) is the amount of the predictor variable, years of service. Thus, for any number of Years of Service, we can easily arrive at the predicted salary.

Assume, for example, that our regression formula tells us that the starting point of our regression line (the intercept or \( a \)) is 30,500 and the slope of the regression line is 900. We can then figure out that a faculty member with five years of service is predicted to have a salary of:

\[ Y = 30,500 + (900 \times 5) \text{ Years of Service} = 35,000 \]

The example above is a simple two-variable linear regression. Since we want to know about the effects of many variables on Salary, we use multiple regression. Fortunately, the equation for multiple regression is a straightforward extension of the two variable equation.

Suppose that we are looking at just two predictor variables, Years of Service and Years in Rank. The multiple regression procedure might tell us, for example, that with the introduction of this new variable our intercept has changed to 31,000, and the unstandardized regression coefficient (equivalent to the slope of the line) for years of service has changed to 700; and the unstandardized regression coefficient for years in rank is 800. For a faculty member with 5 years of service, two of which have been in his or her current rank, the predicted salary would be:

\[ Y = 31,000 + (700 \times 5) + (800 \times 2) \]

or Predicted Salary = $36,100

But what happens when we try to include some of the other variables we want to use to explain salary? How can we multiply an unstandardized regression coefficient times Discipline, or Functional area, or Rank?

A. Including "Dummy" Variables

The two independent or predictor variables we have thus far included in our example, Years in Rank and Years of Service, are continuous variables. That is, their intervals are equal distances apart, i.e., each additional Year of Service or Year in Rank is equivalent to any other Year of Service or Year in Rank. Such variables can be entered into regression analysis in their current form. However, many of the independent variables commonly used in studies of salary equity do not meet the assumption of equal intervals, i.e., they do not have numeric value. Special steps must be taken before they can be included in the multiple regression analysis.

Discipline, Gender, Race and Rank are variables that either cannot be ordered, i.e., Discipline, Gender and Race, or if they have an order, the difference between levels is not
necessarily the same, i.e., the distance between 1 and 2 is not the same as the distance between 3 and 4.

For instance, we do not know if the value difference between being an instructor and an assistant professor is the same as the value of difference between being an associate professor and a full professor, or whether a professor is worth twice as much as an assistant professor and four times as much as an instructor. Similarly, we do not have a basis for deciding that being in the Business/Management Discipline is worth twice as much as being in the Education Discipline, but only half as much as being in the Computer and Information Sciences Discipline.

Regression analysis can actually tell us what these relationships are. To allow it to tell us these relationships, we need to transform these variables. We do this by making them into what are called "dummy" variables.

Dummy coding is a way of quantifying variables that are basically qualitative or categorical in nature. If you have a group membership variable (e.g., race, sex, rank, etc.), you then need to convert each category within the variable into a separate variable. Each of these new dummy variables has only two values: zero or one.

For instance, for the variable Female, all women are coded 1 and all others are coded 0; for the variable Assistant Professor we assign the value of 1 to those who are assistant professors and the value of 0 to all others. The transformation to dummy variables, therefore, involves an increase in the number of variables. Where there was originally one categorical variable called Rank, there are now five dummy variables - one for each rank category. Where there was originally one variable for Gender, there are now two, one for Male coded 1 and 0; and, one for Female coded 1 and 0.

When entering a group membership variable into the regression analysis, one of the dummy categories is omitted. This is because you convey all of the information contained in the codes of the original variable with one less than the number of categories.

The selection of the particular category to be omitted from the regression analysis is arbitrary and picking one group rather than another does not affect the analysis.

The estimate for the omitted category is represented by the intercept. For example, if the category for male is omitted for Gender and the category of associate professor is omitted for Rank, and the category of social sciences is omitted for Discipline, the intercept will be the estimate for the average salary for male associate professors in social sciences with zero Years of Service and zero Years in Rank. To calculate the average salary for any other group, the unstandardized regression coefficient for that group is added to the intercept. (In the case of a negative unstandardized regression coefficient, the sum will be less than the intercept because adding a negative number to a number results in a lesser amount.)
Returning to our equation examples, suppose we now include the dummy variables for Gender and Discipline in the regression analyses. We leave out Male and Social Science. The resulting multiple regression equation might indicate, for example that the intercept is 33,000 and the unstandardized regression coefficients are:

- **Years of Service** = 700
- **Years in Rank** = 900
- **Fine Arts** = -400
- **Business** = 2,500
- **Female** = -900

To estimate the salary of a male with three Years of Service and three Years in Rank in the discipline of Business, we would use the following equation:

\[
\text{Pred. Salary} = 33,000 + (3 \times 700) + (3 \times 900) + 2,500 + 0 = 40,300
\]

Assuming some faculty members who all have three Years of Service and three Years in Rank, we would predict their salaries as follows:

**Female in Business:**

\[
\text{Pred. Salary} = 33,000 + (3 \times 700) + (3 \times 900) + 2,500 + -900 = 39,400
\]

**Female in Social Science:**

\[
\text{Pred. Salary} = 33,000 + (3 \times 700) + (3 \times 900) + 0 + -900 = 36,900
\]

**Male in Fine Arts:**

\[
\text{Pred. Salary} = 33,000 + (3 \times 700) + (3 \times 900) + -400 + 0 = 37,400
\]

Remember that the intercept represents the salary for faculty members in the categories of Social Science and Male. You can see by these examples that the parameter estimate (or unstandardized coefficient) for the dummy variable Female is a measure of how much on average it costs a faculty person to be a woman, assuming that all the other variables in the equation are held constant. Similarly, dummy variables for Race, such as African American and Latino, can indicate the average effect of each Race category.

**B. How Good is the Regression Equation?**

It is important to know how to judge the validity of different regression equations. Returning to our body weight example, we could run a regression equation with a lot of
variables, such as Eye Color and Make of Automobile that did not strongly related to the dependent variable. The result would be a fancy equation that would not tell us much.

Multiple regression provides an estimate of how well the set of independent or predictor variables (e.g., Eye Color, Shoe Size) account for the variation in the dependent variable (e.g., individual Body Weight.) This measure is called the Adjusted R-Square (Adj. R²). An Adj. R² of .75 indicates that 75 percent of the variation in salary is accounted for by the predictor variables in the equation; an Adj. R² of .55 indicates that 55 percent of the variation is accounted for by the variables.

Another way of conceptualizing this is in terms of the scatter points around our "best fit" line that we observed in Figure 2. The smaller the scatter of observed points around the regression line that is represented by the regression equation, the better the prediction and the closer the Adj. R² is to 1. If there is no association between the predictor variables and the dependent variable (i.e., the scatter is random and does not tend to form a line), then the Adj. R² = 0.

In the social sciences, Adj. R²'s below .3 are generally thought to indicate little or no association. Those in the range of .4 to .6 are considered to indicate moderate associations. Those above .7 are considered strong associations, indicating that most of the variations in the dependent variable have been accounted for by the independent or predictor variables.

Table 2 illustrates some typical computer output resulting from a multiple regression analysis of some faculty salaries.

As we have explained, the Adj. R-Square is particularly relevant information. In this case, it is .8211. This means that 82.11 percent of the variation in salary is accounted for by the variables in the equation. The remaining 17.89 percent could be due to random factors, or variables left out of the equation. An adjusted R-square of this magnitude is an indication that the variables in the equation are explaining most of the variation in salaries.

The last columns in Table 2, Standard Error, T Value, and Probability, are all important for inferential statistics. Inferential statistics make inferences about a population based on a sample. If we wanted to draw conclusions that extended beyond the cases included in this equation, then these estimates would be important. However, for our analyses, we are dealing with the entire population of faculty at any one SUNY institution at one point in time, so interpretation of them is not meaningful.

On the far left, the independent variables are identified. The next column, DF, indicates the degrees of freedom. Each variable has one degree of freedom associated with it. The next column, Sum, is the sum of that variable for all cases in the equation. For dummy variables, the
### Table Two

**PROXY COLLEGE REGRESSION ANALYSIS OF FACULTY SALARIES**

**Dependent Variable:** SALARY  
**Dummy Variable Defaults:** MALE, SOC SCI, Ph.D, ASSOC

**R-squar** 0.8325  
**Adj R-Sq** 0.8211  
**Percent of variance accounted for** 82%

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<tr>
<th>Variable</th>
<th>DF</th>
<th>Sum</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T for HO: Parameter=0</th>
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sum tells the number of cases in that category. We see that at this college there are 81 assistant professors and 134 full professors included in the equation.

The next column is the Parameter Estimate column. The specific type of parameter estimate shown in this column is the unstandardized regression coefficient that we have been describing. A one unit change in the variable results in a change in Predicted Salary that is shown by the parameter estimate.

As previously indicated, when dummy variables are used in a regression equation, one category for each group membership variable must be omitted from the equation. On Table 2 the omitted variables are listed at the top as "Dummy Variable Defaults." In this case they consist of male for Gender, social science for Discipline, Ph.D. for Educational Attainment; and, associate professor for Rank.

With these categories omitted the Intercept (which is listed in the first row) would represent the salary for a male associate professor in a social science Discipline, whose highest degree is a Ph.D. This also explains why these variables are not found in the variable list (i.e., the first column).

We can look down this column to the regression coefficient (labeled Parameter Estimate in Table 2) for Yr_Rank, and see that it is 544.348571, and add that sum to the intercept to get a more accurate estimate of his or her salary.

If s/he is not an associate professor but is an assistant, we would add -$5,447 (the unstandardized regression coefficient for assistant professors) to his or her salary to improve our estimate. (Note that when a negative number is added, the number it is added to is actually reduced by that amount. Thus, the result is subtraction.)

The unstandardized regression coefficient for the variable Female, shows us that even when controlling for all other factors in the equation, women at Proxy College are paid an average of $1,017 less than men. Again, this is indicated by the unstandardized regression coefficient being a negative number.

To see if you understand this output, figure the predicted salary for a full professor with a Ph.D. and three years in Rank and ten years in service in the discipline of Business. You should get a predicted salary of $46,895 if this faculty person is a male and $45,878 if this faculty person is a female (rounding to the nearest whole number).
APPENDIX B

An Alternative Method: Using the White Male Equation

Although using the minority male and female dummy variable coefficients from the overall model, as described in Appendix A, is fairly straightforward and understandable, it assumes that the slope of the line relating the salaries of women, minorities and white men to each of the independent variables is roughly the same. The intercept can change, so women and minorities can be paid less on average for a unit of change on an independent variable, but the lines are assumed to be parallel, i.e., have the same slopes. Since there may be differences in the average increments in salary based on the gender and/or race of the person, an alternative method is frequently suggested in the literature. This alternative is to use a measure of the degree to which women's or minorities actual salaries differ from their predicted salaries using the white male regression equation.

To apply this method, you derive the regression equation using only the data for the white males. This "white male" equation can be used to predict the salaries for the women and minorities as if they were rewarded in the same way as the white males. The difference between each employee's predicted and actual salary is called the residual.

The average salary residuals for a gender or race category measures the difference between the salaries of white male faculty as a group and the minority category as a group. If the residual is negative, the actual salary is lower than what their predicted salaries would be using the white male equation.

Problems can arise in applying this method. The population being studied may not have enough white males to allow for a statistically valid regression model. If there are fewer than 50 white males among faculty at a particular campus, in our opinion, the accuracy of the white male regression model is questionable.

Another problem that arises frequently is that there are no white men in categories where women and minorities exist. In our analyses, this problem arose most frequently in regard to Discipline. Depending on the school, we were likely to find that there were no white male comparators for those in the disciplines of nursing, home economics, health professions, library science, Natural Science Technologies (includes home economics, food service and laboratory technologies), and public service technologies. We also had no white male comparators in some Rank and Initial Rank categories, particularly non-tenure track and library ranks; and in some highest degree categories such as Masters degrees. Categories that lacked white male comparators were more prevalent at smaller schools but, they also existed at some of our largest institutions.

When you attempt to apply the white male equation to any category where there are no white males, you do not know what the weight, i.e., parameter estimate, should be for that
category. For example, if there are no white male nursing
category at a particular campus, then there would be no
discipline weight for those in nursing.

Initially, we attempted to solve this problem by dropping
those minorities and women who were in a category that had no
white male comparators. Thus, their salaries would not
contribute to the average residual. We found, however, that
this approach almost always substantially reduced the amount
disparity shown. We reasoned that categories with no white
male comparators tend to be underpaid for other features of
t heir career profiles, such as their degrees and years of
experience. Thus, dropping these individuals from the
analysis underestimates the gender and race salary
disparities.

We considered borrowing the coefficients for the
categories in which there were no white males from the overall
model. This would mean that if there were no white males in
the discipline of Natural Science Technologies, then we would
borrow the weight (coefficient) given to that discipline in
the overall equation and insert it in the white male equation.
We were, however, uncomfortable with selecting a piece of one
equation and forcing it into another equation.

The solution that worked best for us was using the
coefficient for the women or minority male category from the
overall model as the salary residual for the individual women
and minority males for whom there were no white male
comparators. This approach avoided mathematically changing
the white male model while providing an appropriate estimate
or "plug" of the residual for individuals in categories where
there were no white males.

At campuses where there were at least 50 white male
faculty members, we used the white male equation method
described in the previous paragraph as a validity and
reliability check on our findings. In most cases, there was
little difference between using the coefficients from the
overall (males and females included) model and using the white
male model female and minority male residuals. This suggests
that the slopes of the lines representing the relationships
between the salaries of women and minorities and the
independent variables are similar to the corresponding slopes
for white men.

When the results from the white male model were different
from the overall model there frequently appeared to be
anomalies in the white male equation that were not present in
the entire faculty equation. For example, at a couple of
colleges we found that the white male equation had a
coefficient on Ph.D. that was lower than the coefficient for
Masters degrees, but this was not true for the total faculty
workforce regression equation. In other words, when
differences existed, the entire workforce regression equations
frequently appeared to be more logical and defensible than the
white male regression equations.
In summary, we decided to use the entire faculty workforce model as our method of estimating the disparity awards because:

This made it possible to use a consistent method across all schools whether or not there were 50 white male faculty persons at that school.

For the most part, the results from the white male model approach were consistent with the overall model approach. Where the results were inconsistent the overall model was, frequently, more logical and defensible.

The gender and race coefficients from the overall regression model were more easily understood and explained.
## APPENDIX C

### THE VARIABLES INCLUDED IN THE DISPARITY REGRESSION ANALYSIS

1. **Current Salary** (Dependent Variable)
2. **Gender**
3. **Race**  
   a. Black (Non-Hispanic)  
   b. Hispanic/Puerto Rican  
   c. Asian/Pacific Islanders  
   d. American Indian/Alaskan Native  
   e. White (Non-Hispanic)
4. **Current Rank**  
   a. Instructor  
   b. Lecturer  
   c. Assistant Professor  
   d. Associate Professor  
   e. Professor  
   f. Leading Professor  
   g. Librarian  
   h. Associate Librarian  
   i. Senior Assistant Librarian  
   j. Assistant Librarian
5. **Date of Current Rank**
6. **Rank at Initial Appointment**  
   a. Instructor  
   b. Lecturer  
   c. Assistant Professor  
   d. Associate Professor  
   e. Professor  
   f. Leading Professor  
   g. Librarian  
   h. Associate Librarian  
   i. Senior Assistant Librarian  
   j. Assistant Librarian
7. **Year of Birth**
8. **Educational Attainment Level**  
   a. less than high school  
   b. high school graduate  
   c. some college  
   d. associate degree  
   e. bachelor's degree  
   f. some graduate work  
   g. masters degree  
   h. professional degree  
   i. doctoral degree
9. **Year Highest Degree Awarded**
10. **Contract Length**  
    a. 11-12 Months  
    b. 9-10 Months
11. **Department Chair Indicator**
12. **Other Administrative Titles**
13. **Previously Held Administrative Titles**
14. **Years of Part-Time Service**
15. **Years of Full-Time Service**
16. **Years of Professionally Relevant Experience Prior to Current Institution**
17. **Discipline - HEGIS Codes**
ENDNOTES

1. This agreement was negotiated under Nuala Drescher's presidency with John M. Reilly as Chief Negotiator.

2. In addition to gender and race/ethnicity, this committee's first priority was to consider instances of below-average salaries within rank among employees with 10 or more years of SUNY service. The longevity portion of the allocated three million dollars was awarded in February, 1992.

3. The UUP bargaining unit includes both faculty and professionals. An analysis of salary disparities was also conducted for the professionals, but is not covered in this report. Faculty or Academic members of the UUP/SUNY bargaining unit are primarily the teaching faculty but also include librarians and some department chairs and assistant deans.

4. Those excluded from this study were medical residents because of their fixed salary scale; individuals with approved outside sources of income from non-state payroll sources because the standard to discover equity within this group could not be discerned, and part-time employees because their turnover rate and funding mechanisms are too diverse to provide an accurate salary database.

5. Most notably, Geographical Location impacts salaries at so-called "downstate" institutions on Long Island and in New York City where the cost of living is higher and, by extension, the competing market salaries are higher.

6. We thank Kathie Stallmer and Juan Jarret of SUNY Central for their patience and diligence in helping us to collect and correct the data from the individual campuses. We also thank the many unnamed dedicated individuals in the personnel offices at the individual campuses who contributed to the accuracy of the data.

7. A related issue is that for each individual residual (i.e., difference between the actual salary and predicted salary) there is a confidence interval. Theses can be several hundred dollars wide. By contrast, since we have a population and not a sample, the group average differences found at the institutional level is an accurate representation of that group in relation to another group. Tests of statistical significance are not needed for a population.

8. We are very grateful to Dr. Gary Blose of the SUNY Central Office of Institutional Research for his dedication to conducting all the analyses for this project in tandem with our analyses. His statistical and computer skills were extremely helpful in problem solving, and his collegial, "teamwork" approach helped to make our collaboration a pleasure. In most cases, the results of the SUNY Central analyses conducted by Dr. Blose were exactly the same as ours. Where differences remained, they were proportionally insignificant.
9. The third sub-column is calculated by multiplying the first two sub-columns times each other (-coeff x N). This number is divided by the sum of all (professionals and faculty) the multiplications of the first two sub-columns times each other (-coeff x N), which is -773831 for all schools that do not have health science centers, and -7490349 for the four campuses including HSCs. The result is the percent of the total disparity accounted for by that female or minority male category at that campus. This percentage is multiplied by the total amount of money available for distribution, which is $2,178,234. This gives the total amount of the money for that category at that school. Since 80% of this amount is given by this formula and 20% is discretionary, we multiply the total amount for this category by .8. Finally, we divide the result by the number of people in the category to arrive at the figure in the third sub-column.

10. It is very difficult and time consuming to collect and score this information concerning productivity measures (Gray 1980; Scott 1977). For instance, in measuring publications, are we interested in just quantity or also quality? How should we rate a newspaper article versus a book review versus a paper in a refereed journal versus a book? Schrank (1988 p. 10) raises the question of whether or not the decisions of journal referees and grant review committees incorporate gender bias. How can we assess teaching effectiveness? (Allen 1984 p. 14) suggests that variables measuring the quality of teaching are probably unnecessary, since it has never been suggested that women are less effective teachers than men. Would it be necessary to score the productivity variables differently for different disciplines and/or different institutions?

Moreover, Gray indicates that such productivity variables rarely have any significant effect on the results. This may in part be because, at institutions that stress research and publication, productivity is relatively uniform, i.e., people who have "made it" are remarkably alike. The variations that exist are unlikely to relate strongly or consistently to race or gender (Gray 1990 p. 4). The lack of impact of productivity-related variables may also be related to high R²'s. With 75 to 91 per cent of the variations in salaries already accounted for, it is unlikely that further variables will substantially raise the R² or lower the estimated standard error. As has been noted (Scott 1977 p. 10), once the precision of the estimating equation has reached this level, inserting additional predictor variables will not change the results.

11. The line of "best fit" also creates an average residual of zero. In other words, the average difference between the actual and the predicted scores is zero.

12. Another way to describe the intercept is as the value of Y (Salary) when the value of X (Years of Service) is zero. Thus, with our current example, it is what the average faculty member is paid if s/he has no years of service.
13. To illustrate, in the case of a group membership variable with three categorical codes of A, B and C, the coding would be as follows:

- Dummy 1 = Code 1 if value = A, otherwise code 0.
- Dummy 2 = Code 1 if value = B, otherwise code 0.

The result is:

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Note that we have three categories, two dummy variables and a third variable that is zero on both the dummy variables, implying not A and not B.

14. SAS output usually includes this column elsewhere with other simple statistics. We have transplanted it into this chart so that it is beside the parameter estimate (unstandardized regression coefficient) column.

15. Initially, campuses submitted the additional category of "non-resident alien." These were employees who are supposedly foreign-born individuals and who are non-citizens. We asked the campus personnel offices to establish the race/ethnic background of those in this category so that Latinos, Africans, Asians, etc., would be included with their appropriate racial group.
BIBLIOGRAPHY


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DISCRIMINATION AT THE ACADEMY: PAY EQUITY

F. PEOPLE OF COLOR IN ACADEME: EQUITY, DISCRIMINATION, OR REVERSE DISCRIMINATION?

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School of Business and Management
Temple University

ABSTRACT

A data set from a nationally representative sample of faculty collected in 1989 was analyzed to examine the extent of equity, discrimination or reverse discrimination present. Findings indicated the existence of reverse discrimination in salaries in favor of people of color in academe. Additionally, faculty of Asian origin were more likely to be hired at high quality research universities than equivalent white men. Subsample analyses indicated that the reverse discrimination was limited to fields having fewer than five percent of color employed, however. Implications of the findings for policy in academe are discussed.

INTRODUCTION

Previous research has shown that equal employment and affirmative action legislation has benefitted members of protected groups (Fosu, 1992) without entailing large efficiency costs to the economy (Leonard, 1984). Public outcry against "reverse discrimination," however, has prompted some to call for the dismantling of affirmative action. Reverse discrimination means discriminating in favor of members of protected groups at the expense of individuals not falling in a protected class, i.e., white men (Greenlaw, 1985). Researchers have documented that many workers believe that affirmative action results in preferential hiring of women and people of color that is unfair because they are selected over more qualified white men (Northcraft and Martin, 1982; Summers, 1991).

Discrimination is a multi-dimensional construct (Haberfeld and Shenhav, 1990). At least three facets have been discussed in the academic literature. In addition to simple linear salary penalties, groups may be discriminated against through hiring practices which exclude them from top
quality organizations and through salary-setting practices which devalue their productive contributions to the institution. Thus, when white men experience linear salary penalties, hiring penalties at top quality organizations, or reduced earnings returns to their productivity as compared to equivalent white women or people of color, reverse discrimination may be said to have occurred. I will focus on the comparison between white men and people of color in this paper. My results comparing white men and white women are available upon request (Konrad, 1993).

In the present paper, Lazear's (1986) model of faculty raiding is used to develop a set of hypotheses about reverse discrimination. An empirical test is conducted using a nationally representative data base of college and university faculty collected in the spring of 1989. There are several reasons why it is appropriate to examine the phenomenon of reverse discrimination among college and university faculty.

First, a great deal of concern regarding the prevalence of reverse discrimination in the hiring of college and university faculty has been expressed in the popular press (e.g., Epstein, April 22, 1992; Corseri, April 22, 1992). Second, Lazear argues that his model should apply to faculty because the value of their general skills is readily observable. Previous research has demonstrated the usefulness of readily observable indicators of faculty productivity in predicting individual salaries (Barbezat, 1987; 1989; Gomez-Mejia and Balkin, 1992).

Third, the faculty labor market provides an interesting test of the model because the supply of qualified candidates for faculty positions at any given time is generally restricted to the number of Ph.D.'s in each respective field. Supply curves are slow to change in response to demand, since it takes several years to acquire the necessary educational credentials. The percentage of qualified candidates that are women and people of color varies widely between fields, allowing the effect of shortages on salaries to be examined. The case of faculty is not generalizable to all labor markets, of course, but may be generalizable to other labor markets in which the supply of labor is restricted by relatively stringent credential or human capital requirements.

BACKGROUND AND HYPOTHESES

The following discussion is divided into two sections. In the first section, Lazear's model of faculty raiding is outlined. In the second section, his model is extended to account for affirmative action pressures on colleges and universities. Two propositions are developed from the theory and testable hypotheses for the present research are derived from these.

A. Lazear's Model of Faculty Raiding

Raiding means that a worker receives an outside wage offer that is larger than his/her current wage. Lazear (1986) argued that three conditions are required for raiding to succeed. First, the outside firm must have information about
the worker's general skills. Second, the worker's current wages must be lower than the value of his/her general skills. If the first two conditions are fulfilled, the worker will receive an outside offer.

A third condition must be fulfilled, however, for the raider to successfully induce the worker to move. This third condition is that the worker's firm-specific skills have a negative value to the current employer such that they reduce the worker's overall value to the current firm. Lazear (1986) derives this conclusion from the following argument. The current employer will match outside offers up to the value of the worker's output to the firm. The value of the worker's output is a sum of the value of his/her general skills (M) and specific skills (S), or (M + S) in Lazear's notation.

When the outside offer exceeds \((M + S)\), the offer will not be matched and the worker will move. However, the outside firm will bid up the worker's wages only to the value of the worker's general skills \((M)\). Thus, for the outside wage offer to exceed the amount the current employer is willing to match, the value of \((S)\) must be negative such that the worker holds specific skills that reduce the overall value of the worker to the current firm. Raiding will, therefore, increase the odds that the worker is employed at a firm in which his/her skills are positively valued. For this reason, raiding ensures that workers will be employed efficiently.

According to this logic, there are three reasons why a worker will remain with the current employer (Lazear, 1986, 157):

1. The worker was raided, but his/her specific skills had a positive value for the current employer;
2. The worker's wages are less than the value of his/her general skills but no outside employer has discovered it; or
3. The worker's wages are higher than the value of his/her general skills (the situation Lazear labels, the "winner's curse.")

B. Extending Lazear's Model to Account for Affirmative Action

Adding affirmative action concerns to Lazear's (1986) model suggests two things. First, given equal quality, the wages and institution prestige of members of protected groups are higher than those of white male workers. Second, the wage and institution prestige penalties experienced by white men will be larger in specialties where there are fewer members of protected groups currently employed. Each of these propositions is discussed below.

**Proposition 1:** Given equal quality, the wages and institution prestige of members of protected groups are higher than those of white men.
This paper considers the case where educational institutions engage in raiding to fulfill affirmative action objectives in addition to obtaining the highest quality faculty available. Under affirmative action pressures, members of protected groups have additional value for the firm as "tokens." The term token was defined by Kanter (1977) as an individual who symbolizes the firm's good faith efforts to include members of protected groups. The value of the worker to the firm becomes a combination of his/her general and specific skills, or \(M + S\) as suggested by Lazear, plus his/her value as a token, which I will denote as "AA." For definition purposes, I will consider AA to have a positive value for members of protected groups (e.g., people of color and white women) and a value of zero for others. In this view, the worker's overall value to the firm is \(M + S + AA\).

Assuming that all firms face affirmative action pressures, a member of a protected group will receive an outside offer when his/her current wage is lower than his/her value as assessed by the sum of the value of his/her general skills and his/her value as a token. In Lazear's (1986) model, a raiding attempt causes a worker's wages to be bid up, possibly as high as the value of his/her general skills \(M\), but no higher. Under affirmative action pressures, however, the wage ceiling becomes the sum of the value of the worker's general skills plus the value of the worker's token status \(M + AA\).

For a white man whose token status equals zero, the wage ceiling remains the value of his general skills. For members of protected groups, however, token status has a positive value and this increases the wage ceiling. Since token status makes members of protected groups more valuable, they should have higher salaries.

Being employed at a prestigious institution is a reward that is highly valued by faculty. Additionally, previous research has shown that institution type is a significant predictor of faculty salaries, with high quality universities being the salary leaders (Konrad and Pfeffer, 1990). If reverse discrimination were occurring in academe, people of color would be employed at more prestigious institutions than equivalent white men.

**Hypothesis One:** Members of protected groups will have higher salaries and will be employed at more prestigious institutions than equivalent white men.

**Proposition 2:** The penalties experienced by white men will be larger in specialties where fewer members of protected groups are available.

In fields employing few members of protected groups as faculty, affirmative action pressures are the greatest. Institutions need to add members of protected groups to those departments where few white women and people of color are currently employed. Increased demand resulting from affirmative action pressure suggests that it is in fields where members of protected groups are scarce that white male
salary penalties are most likely to be observed. Additionally, it is in fields where members of protected groups are scarce that they should be most likely to experience an advantage in terms of employment at high quality institutions.

Hypothesis Two: White men will experience larger salary and institution prestige penalties in specialties where members of protected groups are scarce.

DATA AND METHODS

The data used in the present study were taken from the Carnegie Foundation for the Advancement of Teaching Survey of College and University Faculty, a nationally representative data base collected in the Spring of 1989. A two-stage stratified random sample design was used to select college and university faculty for inclusion in the study. In the first stage, universities and colleges were selected with a likelihood proportionate to the size of their faculties; in the second stage, individual faculty members were designated at each chosen institution. The original sample size was 10,000. After four mailings, 5,450 faculty had returned usable responses.

Certain respondents were excluded from the analyses for the following reasons. Faculty who indicated that their academic discipline was one of the six specialties including fewer than twenty-five respondents were eliminated from the analysis. Native Americans were excluded from the analysis because there were fewer than twenty-five of them. Respondents who did not indicate their sex or ethnic origin, or who designated their ethnic origin as "other" were also excluded. Non-citizens of the United States were included in the analyses to maintain sufficient numbers of people of color in the sample.

Listwise deletion of missing data resulted in a sample size of 3,211 white men; 1,361 white women; 111 men and women of Asian origin; 82 men and women of African origin; and 63 men and women of Hispanic origin.

A. Measures

Respondent sex, ethnic origin, academic field, annual institutional salary, years of experience as faculty, and highest degree were obtained from responses to questionnaire items. Institution type was assessed using the Carnegie Commission on Higher Education classification codes, which were included on the data tape. The questionnaire included several measures of faculty productivity, including research, teaching and service. These are described in detail below.

(1) Research Productivity. Research productivity was assessed by asking faculty to describe their publication records as well as asking for the number of hours devoted to research or scholarship weekly, and whether a grant from a funding agency outside the employing institution had been obtained in the last twelve months.
In the questions on publication record, faculty were asked to indicate the number of journal articles, book chapters, and books they had published professionally. They were also asked to indicate how many professional writings had been published or accepted for publication in the last two years. These measures are referred to in the tables as hours of research/week, outside grant, n articles, n books, n chapters, and n recent publications.

(2) Teaching Productivity. Faculty were asked to indicate the number of formal classroom hours per week teaching undergraduates and graduate students, and the number of hours per week spent preparing for teaching. These measures are referred to in the tables as "hrs teach UG; hrs prep."

(3) Service Productivity. Faculty were asked to indicate the hours per week they devoted to administrative service (departmental or institutional). This measure is referred to in the tables as "hrs service."

The Appendix shows means and standard deviations for all human capital and productivity measures for each of the five demographic groups of faculty.

(4) Scarcity of Women and People of Color. Faculty were asked to indicate which of 28 categories best represented their academic specialty. Eliminating fields with fewer than 25 respondents reduced the number of categories to 22. Kanter's (1977) categories were used as a guide for grouping specialties into conditions of relative scarcity of women and people of color. Kanter indicated that when there are 15 percent or fewer of any particular social type in a group, the group is "skewed." Kanter labeled groups having 16 to 35 percent of one social type "tilted" and groups having 36 to 64 percent of each social type as "balanced."

Using Kanter's categories, all fields included in the data base would have been considered skewed on the basis of ethnicity, since all were comprised of 15 percent faculty of color or fewer. For this reason, fields were categorized as extremely skewed when there were 5 percent or fewer faculty of color, and skewed when faculty of color comprised more than 5 percent. Seven of the 22 academic fields included 5 percent or fewer faculty of color. These fields were architecture/environmental design, biological/life sciences, communications/journalism, fine arts, geography, humanities, and physical/health education.

B. Empirical Model

To examine the simple linear impact of demographic group membership on salaries, I estimated equations of the form:

\[ W = \beta_1 \ DEM + \beta_2 \ HC + \beta_3 \ PROD. \]

W is the natural logarithm of annual institutional salary. By convention, the natural logarithms is used to correct for skewness in the salary distribution. DEM is a vector of
demographic characteristics, specifically, being of African, Hispanic or Asian origin. \( HC \) is a vector of productivity-related characteristics, including holding a doctoral degree, years of experience, and years of experience squared. \( PROD \) is a vector of the research, teaching and service productivity measures described above. OLS regression was used to estimate this model. To examine the effects of scarcity of protected groups on salary discrimination, I estimated equation (1) separately for individuals in extremely skewed, and skewed fields with respect to ethnicity.

Each academic field may be considered a separate labor market with unique supply and demand characteristics. Thus, ethnicity effects on salaries might be attributable to the fact that different demographic groups are in different academic fields. To account for this possibility, a vector of dummy variables indicating the individual's academic field was added to equation (1). These results are not reported in the tables, but where appropriate, in the text.

Hiring discrimination was examined by estimating the effects of ethnicity on being employed at a high quality research university. A dummy variable indicating whether or not the individual was employed at a Research I University (coded 1 = yes, 0 = no) comprised the dependent variable in a logistic regression analysis. Independent variables included \( DEM, HC \) and research productivity as described above. Teaching and service productivity were not included as independent variables in this analysis because they are probably not causally prior to being employed at a high quality research university. To examine the effects of scarcity of protected groups on hiring discrimination, I conducted logistic regressions separately for individuals in fields that were extremely skewed and skewed by ethnicity.

Discrimination in salary setting practices which devalue the productivity of some demographic groups was examined using the procedures developed by Oaxaca (1973). This procedure decomposes wage gaps into differences due to average worker characteristics and differences due to returns to average characteristics. The portion of the wage gap due to different returns to productivity-related characteristics has been considered a measure of discrimination. Specifically, if white men receive larger salary increases for each unit of productivity than members of protected groups, discrimination is said to have occurred. If white men receive smaller salary increases for each unit of productivity, reverse discrimination is said to have occurred.

The question of interest here is whether the scarcity of people of color affects the direction and size of the discrimination coefficient. Separately for white men and people of color, I estimated equations of the form:

\[
W = \beta_2 HC + \beta_3 PROD.
\]

Decomposition of the salary gaps was conducted in fields that were extremely skewed and skewed by ethnicity to examine scarcity effects on reverse discrimination.
I did not conduct additional estimates of equation (2) with controls for academic field for two reasons: First, the need to conserve degrees of freedom with a relatively small n of people of color in some equations, and second, the fact that the effects derived through decomposition are drastically affected by the arbitrary choice of omitted field in the regression equation.

RESULTS

Hypothesis 1 stated that members of protected groups will have higher salaries and will be employed at more prestigious institutions than equivalent white men. This hypothesis was tested by examining the results of equation (1) and the results are shown in Table 1. The hypothesis was supported for faculty of Asian origin, who received a 7 percent salary bonus; and for faculty of African origin, who received a 6 percent salary bonus, for faculty of Hispanic origin who received a 7 percent salary bonus when human capital and research, teaching, service productivity and academic field were controlled. The salary bonuses received by people of color were all significant at the p < .05 level when academic fields were controlled.

The logistic regression analysis, shown in Table 2, resulted in a significant positive coefficient indicating that faculty of Asian origin were more likely to be employed at high quality research universities than equivalent white men. The coefficients on white female, African, and Hispanic origin were not significant.

Hypothesis 2 stated that white men will experience larger salary and institution prestige penalties in specialties where members of protected groups are scarce. This hypothesis was tested by estimating equations (1) and (2) in fields that were extremely skewed and skewed by ethnicity.

Results derived from equation (1) are shown in Table 3. With controls for academic field, findings indicated that there was a 6 percent salary bonus in extremely skewed fields (p < .10), and no significant salary effect of ethnicity in skewed fields, supporting hypothesis 2.

Results derived from equation (2) are shown in Table 4. Durbin-Watson statistics were calculated to determine the effect of the inability to control for academic field in these equations. A Durbin-Watson close to 2.00 indicates no bias in the estimates due to omission of an important predictor variable. All Durbin-Watson statistics were acceptable, increasing confidence in the robustness of the coefficients.

The r-values shown tested whether the coefficients in the white men's equations differed significantly from those in the white women's equations. A r-value greater than 1.64 indicates a difference significant at the .10 level, and a r-value greater than 1.96 indicates a difference significant at the .05 level. The r-value indicated that none of the coefficients were significantly different between white men
and people of color in extremely skewed fields, however, the small n of people of color in extremely skewed fields inflated the standard errors on the coefficients, substantially reducing the power of the t-tests. In skewed fields, significant differences between coefficients were observed (t > 1.64; p < .10), indicating that people of color received lower earnings returns than white men for obtaining an outside grant, but were penalized less than white men for years of experience squared.

Decomposition of the salary differentials showed that people of color received considerably lower salary returns to their productivity-related characteristics than white men. In extremely skewed fields, estimates of the impact of different coefficients on salaries ranged from 83 percent to 183 percent of the observed salary difference. This indicated that people of color received equal returns on their productivity-related characteristics, the salary bonus they received would have been 83 to 183 percent larger. In skewed fields, the impact of different coefficients on salaries was 300 percent, regardless of which set of coefficients was used as the standard. This finding suggests that had people of color received returns on their productivity-related characteristics equal to those received by white men, the nonsignificant salary bonus received by people of color in skewed fields (3 percent) would have quadrupled.

In summary, the salary analyses showed that white men experienced a significant (p < .10) wage penalty in extremely skewed fields, however, decomposition results indicated that people of color experienced discrimination in the returns they received to their productivity-related characteristics in extremely skewed and in skewed fields.

Results of the logistic regressions examining employment at high quality research universities are shown in Table 5. Teaching and service productivity were not included in these equations to conserve degree of freedom and because they were seen as probably not causally prior to employment at a research university. Results indicated that people of color experienced a significant institution prestige advantage in extremely skewed fields, and no significant advantage in skewed fields, supporting hypothesis 2.

The magnitude of logistic regression coefficients is not readily interpretable in an intuitive sense. For this reason, a simulation analysis was conducted to aid interpretation of the significant negative coefficient (-.68) of being a white man in extremely skewed fields, following Kelley (1990). Results of this analysis indicated that the probability of being employed at a high quality research university was .68 for a white man whose human capital and productivity characteristics were exactly average for the white male sample.

The probability for a person of color whose human capital and productivity characteristics were exactly equal to the average for white men in the sample was .81. Thus, the simulation indicated that a person of color whose
Table One

SALARY REGRESSION FOR ENTIRE FACULTY SAMPLE

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFF (S.E.)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>-.10</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>.11</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>.07</td>
<td>&lt;.05</td>
</tr>
<tr>
<td></td>
<td>(.03)</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>.05</td>
<td>ns</td>
</tr>
<tr>
<td></td>
<td>(.03)</td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>.10</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>.03</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>Experience(^2)</td>
<td>-.0004</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.00005)</td>
<td></td>
</tr>
<tr>
<td>n Articles</td>
<td>.006</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.002)</td>
<td></td>
</tr>
<tr>
<td>n Books</td>
<td>.004</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>n Chapters</td>
<td>.002</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>(.0005)</td>
<td></td>
</tr>
<tr>
<td>n Recent Pubs.</td>
<td>.005</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>Hours of Research/Week</td>
<td>.002</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.003)</td>
<td></td>
</tr>
<tr>
<td>Outside Grant</td>
<td>.06</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td></td>
</tr>
<tr>
<td>Hours Teach UG</td>
<td>-.006</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.0006)</td>
<td></td>
</tr>
<tr>
<td>Hours Teach Grad</td>
<td>.002</td>
<td>&lt;.10</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>Hours Prep</td>
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<td>&lt;.01</td>
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<td>(.0005)</td>
<td></td>
</tr>
<tr>
<td>Hours Service</td>
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<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>(.0004)</td>
<td></td>
</tr>
</tbody>
</table>

Adjusted \( R^2 = .50 \)

\( n = 4828 \)

Durbin-Watson = 1.76

Note: When academic fields were controlled, the coefficient on Hispanic was positive and significant at the .05 level.
<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFF (S.E.)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.01 (0.12)</td>
<td>ns</td>
</tr>
<tr>
<td>Asian</td>
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</tr>
<tr>
<td>African</td>
<td>-0.06 (0.45)</td>
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</tr>
<tr>
<td>Hispanic</td>
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</tr>
<tr>
<td>Doctorate</td>
<td>0.72 (0.17)</td>
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</tr>
<tr>
<td>Experience</td>
<td>-0.02 (0.02)</td>
<td>ns</td>
</tr>
<tr>
<td>Experience²</td>
<td>0.0006 (0.0004)</td>
<td>ns</td>
</tr>
<tr>
<td>n Articles</td>
<td>0.006 (0.002)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>n Books</td>
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<td>ns</td>
</tr>
<tr>
<td>n Chapters</td>
<td>0.008 (0.005)</td>
<td>ns</td>
</tr>
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<td>n Recent Pubs.</td>
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</tr>
<tr>
<td>Hours of Research/Week</td>
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</tr>
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<td>Outside Grant</td>
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</tr>
<tr>
<td>Intercept</td>
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<td></td>
</tr>
<tr>
<td>-2 log likelihood</td>
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<td></td>
</tr>
<tr>
<td>$X^2$ (df = 13)</td>
<td>374.01</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>4828</td>
<td></td>
</tr>
</tbody>
</table>
Table Three

SALARY REGRESSIONS COMPARING FIELDS WITH LOW AND HIGH PERCENTAGES OF PEOPLE OF COLOR

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>LE 5%</th>
<th>GT 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>-0.06$</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0.07***</td>
<td>0.10***</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Experience</td>
<td>0.03***</td>
<td>0.03***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Experience^2</td>
<td>-0.0004***</td>
<td>-0.0004***</td>
</tr>
<tr>
<td></td>
<td>(0.00006)</td>
<td>(0.00005)</td>
</tr>
<tr>
<td>n Articles</td>
<td>-0.0001</td>
<td>0.001***</td>
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<tr>
<td></td>
<td>(0.0002)</td>
<td>(0.0002)</td>
</tr>
<tr>
<td>n Books</td>
<td>0.0007***</td>
<td>0.0021</td>
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<td>(0.0013)</td>
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<td>n Chapters</td>
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<td>0.002***</td>
</tr>
<tr>
<td></td>
<td>(0.0008)</td>
<td>(0.0007)</td>
</tr>
<tr>
<td>n Recent Pubs.</td>
<td>0.003***</td>
<td>0.006***</td>
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<td></td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Hours Research/Week</td>
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<td>0.002***</td>
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<tr>
<td></td>
<td>(0.0006)</td>
<td>(0.0005)</td>
</tr>
<tr>
<td>Outside Grant</td>
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<td>0.06***</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Hours Teach UG</td>
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<td>-0.004***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Hours Teach Grad</td>
<td>-0.001</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Hours Prep</td>
<td>-0.002*</td>
<td>-0.0007</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.0008)</td>
</tr>
<tr>
<td>Hours Service</td>
<td>0.005***</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.0006)</td>
</tr>
<tr>
<td>Adj R^2</td>
<td>.48</td>
<td>.46</td>
</tr>
<tr>
<td>n</td>
<td>1289</td>
<td>2220</td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.86</td>
<td>1.71</td>
</tr>
</tbody>
</table>

Notes: # p < .10; * p < .05; ** p < .01; *** p < .001

Only white men and people of color were included in these analyses. When academic field was controlled, the coefficient on white was negative and significant in fields with 5 percent minorities or fewer.
## Table Four
### Salary Regressions

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFF.</th>
<th>S.E.</th>
<th>p</th>
<th>COEFF.</th>
<th>S.E.</th>
<th>p</th>
<th>t</th>
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<td>0.0001</td>
<td>&lt;.001</td>
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<td>0.0005</td>
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<td>0.0038</td>
<td>&lt;.10</td>
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<td>0.0007</td>
<td>&lt;.001</td>
<td>0.0027</td>
<td>0.0042</td>
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n = 1,229

Adjusted $R^2 = 0.489$

Durbin-Watson = 1.886

Adjusted $R^2 = 0.386$

Durbin-Watson = 1.728
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<th>p</th>
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<th>S.E.</th>
<th>p</th>
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<td>1.57</td>
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<td>0.0064</td>
<td>&lt;.05</td>
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</tr>
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<td>0.0013</td>
<td>ns</td>
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<td>0.0134</td>
<td>ns</td>
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<td>0.0067</td>
<td>0.0039</td>
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<td>0.0009</td>
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<td>-0.0199</td>
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<td>ns</td>
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<td>0.0005</td>
<td>&lt;.001</td>
<td>0.0029</td>
<td>0.0020</td>
<td>ns</td>
<td>-0.49</td>
</tr>
<tr>
<td>Hours Prep</td>
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<td>0.0008</td>
<td>ns</td>
<td>0.0007</td>
<td>0.0029</td>
<td>ns</td>
<td>-0.50</td>
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<td>Hours Teach UG</td>
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<td>0.0012</td>
<td>&lt;.01</td>
<td>-0.0062</td>
<td>0.0019</td>
<td>ns</td>
<td>0.66</td>
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<td>0.0053</td>
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<td>0.0006</td>
<td>&lt;.001</td>
<td>0.0030</td>
<td>0.0027</td>
<td>ns</td>
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</table>

n = 2,022
Adjusted R^2 = 0.473
Durbin-Watson = 1.734

198
0.339
1.55
Table Five
LOGISTIC REGRESSIONS PREDICTING EMPLOYMENT IN A HIGH QUALITY RESEARCH UNIVERSITY AND COMPARING FIELDS WITH LOW AND HIGH PERCENTAGES OF PEOPLE OF COLOR

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>LE 5%</th>
<th>GT 5%</th>
</tr>
</thead>
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<tr>
<td>White</td>
<td>-.68*</td>
<td>-.13</td>
</tr>
<tr>
<td></td>
<td>(.31)</td>
<td>(.18)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>.41*</td>
<td>.83***</td>
</tr>
<tr>
<td></td>
<td>(.19)</td>
<td>(.22)</td>
</tr>
<tr>
<td>Experience</td>
<td>.03</td>
<td>-.03</td>
</tr>
<tr>
<td></td>
<td>(.03)</td>
<td>(.02)</td>
</tr>
<tr>
<td>Experience²</td>
<td>-.0005</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>(.0007)</td>
<td>(.0004)</td>
</tr>
<tr>
<td>n Articles</td>
<td>-.00005</td>
<td>.02***</td>
</tr>
<tr>
<td></td>
<td>(.003)</td>
<td>(.003)</td>
</tr>
<tr>
<td>n Books</td>
<td>.02</td>
<td>-.003</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.01)</td>
</tr>
<tr>
<td>n Chapters</td>
<td>(.005)</td>
<td>(.015)*</td>
</tr>
<tr>
<td></td>
<td>(.008)</td>
<td>(.006)</td>
</tr>
<tr>
<td>n Recent Pubs.</td>
<td>.02**</td>
<td>.03**</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.017)</td>
</tr>
<tr>
<td>Hours Research/Week</td>
<td>.04***</td>
<td>.05***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.005)</td>
</tr>
<tr>
<td>Outside Grant</td>
<td>.48**</td>
<td>.35**</td>
</tr>
<tr>
<td></td>
<td>(.15)</td>
<td>(.11)</td>
</tr>
<tr>
<td>Intercept</td>
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<td>-2.54</td>
</tr>
<tr>
<td>-2 log likelihood</td>
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<td>2244.62</td>
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<tr>
<td>X² (d.f. = 10)</td>
<td>139.68</td>
<td>413.32</td>
</tr>
<tr>
<td>N</td>
<td>1227.00</td>
<td>2148.00</td>
</tr>
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</table>

Note:  # p < .10; * p < .05; ** p < .01; *** p < .001

Only white men and people of color were included in these analyses.
characteristics matched those of the average white man was 13 percent more likely than an average white man to be employed at a high quality research university in extremely skewed fields.

DISCUSSION

In summary, findings indicated the existence of reverse discrimination in favor of people of color in academe. Sub-sample analyses indicated that the reverse discrimination was limited to fields having fewer than 5 percent people of color employed however. Specifically, people of color received a linear salary bonus compared to equivalent white men in fields with fewer than 5 percent people of color. Salary decompositions indicated, however, that people of color received lower earnings returns for their productive contributions compared to white men. Mathematically and theoretically, it is possible for both of these results to be true. The decomposition results indicate a flatter slope in the relationship between salary and productivity-related characteristics for people of color, while the white male wage penalty indicates a lower intercept for the white men's than for the people of color's equation.

Additionally, faculty of Asian origin were more likely to be hired at high quality research universities than equivalent white men. Like the salary bonus, the hiring bonus experienced by people of color was limited to fields having fewer than 5 percent people of color already employed.

What are the implications of these findings for policy in academe? To answer this question, it is important to examine the main problem faced by faculty who are people of color. Evans and Kelley (1991) argued that discrimination should be represented by two constructs: Economic discrimination, meaning earning differentials, and exclusionary discrimination, meaning under-representation or segregation. Findings indicate that economic discrimination in the form of earnings differentials are not a problem faced by faculty who are people of color -- these faculty experience earnings bonuses. By comparison, women experience linear earnings penalties in all fields (Konrad, 1993).

As in the labor force as a whole (Atwater, Nelson and Niehaus, 1992), the main discrimination problem faced by people of color in academe appears to be exclusion. It is telling that in a significant proportion of academic fields included in this study, people of color had representation of 5 percent or less. By comparison, only in engineering were white women excluded to the extent that they comprised 5 percent or less of the field.

Other research has indicated that exclusion, and not earnings discrimination, is the main problem experienced by people of color in academe. In a study examining the composition of academic administrations, Konrad and Pfeffer (1991) found that people of color seldom worked together with white administrators but were segregated into a separate set of institutions, presumably, the historically black institutions of the United States. Nationally representative
data collected in 1978 and 1983 indicated that people of color comprised only 6 percent of higher level administrators in academe, meaning directors, deans and above. This 6 percent was crowded into a relatively small set of institutions such that fully 64 percent of whites and people of color would have had to change institutions to achieve a fully integrated distribution such that each institution in the data set had exactly 6 percent people of color among their administrators. What this figure implies is that the higher levels of most academic administrations had well below 6 percent of people of color.

The position for which people of color were most likely to be hired during the five year interval between 1978 and 1983 was as director of affirmative action. Fully 56 percent of new hires into this position were people of color during the time period. Thus, even when new hires were brought in, they were likely to be placed in a stereotypical position.

Since exclusion is the major problem faced by people of color in academe, the results of the present research indicate that affirmative action pressures are working to remedy that problem. This impact became most apparent in fields where people of color were extremely scarce, with findings showing a significant negative effect of being a white male on employment at a high quality research university. Reverse discrimination was observed, but only in situations where there were very low numbers of people of color employed in the field. As more people of color enter these fields in response to the greater opportunities available to them, the reverse discrimination problem should disappear.

Reverse discrimination will only disappear, however, if there are no barriers to the entry of people of color to fields in which they are currently scarce. Although reverse discrimination in hiring and salaries was observed in extremely skewed fields, this does not imply that reverse discrimination is also occurring with respect to promotion and tenure (Business Week December 7, 1992) and access to educational credentials. If members of protected groups in these fields are not accepted, due to resistance of the white male majority, they will not be tenured, they will not be promoted, and as students, they will not be mentored. The majority should realize that is in everyone's interest to remedy the problem of exclusion of people of color in academe, because only then will this short-term aberration of reverse discrimination disappear.
<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>WHITE MEN</th>
<th>WHITE WOMEN</th>
<th>ASIAN</th>
<th>AFRICAN</th>
<th>HISPANIC</th>
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<td>10.66</td>
<td>10.52</td>
<td>10.52</td>
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<td></td>
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<td>(0.31)</td>
<td>(0.32)</td>
<td>(0.34)</td>
<td>(0.32)</td>
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<td>0.28</td>
<td>0.28</td>
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<td>(0.48)</td>
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<td>(0.39)</td>
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<td>(8.85)</td>
<td>(8.43)</td>
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<td>(6.22)</td>
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### APPENDIX (cont.)

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<th>HISPANIC</th>
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<td>(0.42)</td>
<td>(0.50)</td>
<td>(0.43)</td>
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<td>(3.38)</td>
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<tr>
<td></td>
<td>(7.68)</td>
<td>(8.36)</td>
<td>(4.89)</td>
<td>(7.39)</td>
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</tr>
<tr>
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<td>6.09</td>
<td>5.68</td>
<td>4.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9.46)</td>
<td>(9.13)</td>
<td>(6.79)</td>
<td>(9.68)</td>
<td>(6.61)</td>
</tr>
<tr>
<td>n =</td>
<td>3,211</td>
<td>1,361</td>
<td>111</td>
<td>82</td>
<td>63</td>
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</tbody>
</table>
1. A detailed description of this survey is available in the Technical Appendix for the "Survey Among College and University Faculty" conducted by the Wirthlin Group: 842 State Road, Princeton, New Jersey 08540.

2. The Carnegie Commission classification codes have been described in detail elsewhere (Carnegie Foundation for the Advancement of Teaching, 1987). Briefly: Research universities award at least 50 Ph.D.'s annually. Research universities I are among the 50 leading universities in the terms of federal financial support of academic science; and, research universities II are among the leading 100. Doctoral granting universities I award at least 20 Ph.D.'s annually and receive at least a set minimum level of federal support, while doctoral granting universities II award at least 10 Ph.D.'s annually.

Comprehensive universities and colleges I offer a liberal arts program as well as several other programs, such as engineering and business administration and enroll at least a set minimum number of students. Comprehensive universities and colleges II offer a liberal arts program and at least one professional or occupational program; and, are slightly smaller than comprehensive institutions I. Liberal arts colleges are those institutions with a strong liberal arts tradition and may include some modest occupational programs. Liberal arts colleges I meet certain set requirements for selectivity; and, liberal arts colleges II are those institutions which failed to meet the selectivity standards. The final category of institutions included in this analysis were two-year colleges and institutes.

3. Hersch (1991) provides a succinct explanation of the earnings gap decomposition procedure. I quote her discussion here:

The wage differential between men and women can be written as:

$$\ln W^m - \ln W^f = \Sigma B^m (x'^m - x') + \Sigma x'^f (B^m - B'^f)$$

or as

$$\ln W^m - \ln W^f = \Sigma B'^f (x'^m - x') + \Sigma x'^m (B^m - B'^f)$$

Where $W^m$ and $W^f$ are average hourly wage rates (or annual salaries) of men and women, $x'^m$ and $x'$ are vectors of average values of the independent variables; and $B^m$ and $B'^f$ are the estimated coefficients for the two groups.

The first equation ... decomposes the total wage gap into a part due to differences in the means of the independent variables "valued" at the male coefficients and a part due to differences in coefficients "valued at the female means."

The second equation ... an alternative procedure for decomposing the wage gap, evaluates differences in the means of the independent variables valued at the female coefficients and differences in coefficients valued at the male means.
Since the difference between the choice of weights is an example of the familiar index number problem, there is no theoretical reason for preferring one set of weights over the other. (Hersch, 1991, p. 755, footnote 8).

4. The differences between the respective coefficients in two multiple regressions were tested for statistical significance by computing the t statistic. The t-value is equal to the difference between the unstandardized regression coefficients divided by the square root of the sum of their squared standard errors.