



*The Sounds
of April . . .
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NEWS IN BRIEF

NIXON APPOINTMENT: JONATHAN RHOADS

Dr. Jonathan E. Rhoads, Professor and Chairman of the Surgery Department at the School of Medicine and Chief of Surgery at HUP, is one of 18 appointees named by President Nixon to the new National Cancer Advisory Board. He will serve a six-year term, the White House announcement of March 7 said.

DR. SHEN HEADS NYAS COMMITTEE

A blue-ribbon national committee has been constituted under the auspices of the New York Academy of Sciences for the purpose of encouraging better communication of science to non-scientists and to the general public. Known as the Special Commission on the Public Understanding of Science, it is chaired by Dr. Benjamin S. P. Shen, Professor of Astronomy and Astrophysics at the University. In addition to Dr. Shen, members of the commission include the following University-related persons: Mr. Mitchell Struble, a student in the Graduate School of Arts and Sciences, Dr. Loren C. Eiseley, Benjamin Franklin Professor of Anthropology and the History of Science, and Dr. Detlev W. Bronk, Trustee Emeritus and former president of the National Academy of Sciences.

MARCH 29: MONEY AT 3, SHORT STORY AT 4

Sir Roy Harrod, distinguished British economist, will present a special lecture on "The Breakdown of the International Monetary System" at 3 p.m. Wednesday in Room 286 McNeil Building. An advisor to such organizations as the United Nations and the International Monetary Fund, he comes here under the sponsorship of the International Economics Seminar of the Wharton School.

At 4 p.m., Lore Segal, novelist and short story writer and Adjunct Associate Professor in the Department of Writing of the School of Arts at Columbia University, will discuss "Writing the Short Story." Her lecture is sponsored by the Writing Program of the Department of English and the English Graduate Club. It will be in A-2 David Rittenhouse Lab.

ANNENBERG SYMPOSIUM: CABLE TV

Dr. George D. Stoney, Director of the Alternate Media Center in New York, will talk about "The Mirror Machine—Community Use of Cable Television" on Monday, April 3 at 4 p.m. in the Annenberg School's Colloquium Room. Dr. Stoney is also chairman of the Undergraduate Division of Film and Television at New York University.

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Almanac

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New Chairmen: Fox, Leopold, Others

Dr. Renee C. Fox has been appointed Chairman of the Department of Sociology in the Wharton School, effective July 1. She will succeed Dr. Marvin Wolfgang, who becomes President of the University-based American Academy of Political and Social Sciences.

Dr. Fox, now Professor of Sociology in Psychiatry, recently resigned a post as special assistant to President Martin Meyerson to become a member of the University Development Commission. She is a Phi Beta Kappa graduate of Smith College who earned a Ph.D. from Harvard University. Her numerous academic honors include a 1970 E. Harris Harbison Gifted Teaching Award from the Danforth Foundation and a Master of Arts *honoris causa* from this University in 1971.

Other department chairmen named recently are:

Dr. Robert L. Leopold, former head of the Philadelphia Mental Health Consortium and a Professor of Community Medicine and Community Psychiatry, has been appointed Chairman of the Department of Community Medicine. He succeeds Dr. William L. Kissick, the George S. Pepper Professor of Community Medicine, who resigned the chairmanship to develop new academic programs for medical and graduate students in health care administration and to do research and teaching in community medicine.

Also in the School of Medicine, Dr. James J. Ferguson Jr. has been appointed Chairman of the Biochemistry Department, succeeding Dr. Howard Rasmussen, who is currently a Professor of Biochemistry.

Dr. Benjamin F. Hammond, Professor of Microbiology in the Dental School, has been appointed Chairman of the Department of Microbiology in the School of Dental Medicine effective July 1. He replaces Dr. Ned B. Williams, who will head COHR, the Center of Oral Health Research.

Dr. Norton Taichman, who comes to the University from the Pathology Department of the Dental and Medical Schools of the University of Toronto, has been named Chairman of the Pathology Department in the School of Dental Medicine, effective July 1.

In the Wharton School, Dr. John deCani, Associate Professor of Statistics and Operations Research, was recently named Chairman of his department, succeeding Acting Dean Richard C. Clelland. Effective July 1, Dr. Paul Smith, Professor of Finance, will succeed Dr. Douglas Vickers as Chairman of Wharton's Finance Department.

DISCUSSING SOME ALTERNATIVES TO THE LETTER GRADING SYSTEM

Vice Provost for Undergraduate Affairs Humphrey Tonkin has proposed a faculty discussion of the grading and evaluation process now being questioned on this and other U.S. campuses. The evaluation process was part of one workshop in the fall Conference on Undergraduate Education (Page 3), and grading has been prominent on the agendas of the College Faculty and the College Educational Policy Committee. Here Dr. Tonkin offers the recent SCUE proposals on the subject, and invites comment from his colleagues.

February 13, 1972

A central aspect of every student's experience at Pennsylvania is the nature and quality of the evaluations he receives. At the completion of every paper, exam, and course, the student receives one of five letter grades. Because the grading system is not achieving its objectives and is in cases actually educationally detrimental, SCUE presents to the University community the following report on grading and evaluation.

The grading system appears to have two primary objectives— a) to give the student an indication of the quality of his work within a course and b) to communicate the quality of a student's work to outside evaluating agencies. It is clear, however, that grades do not give a student an adequate appraisal of his work. It is extremely unlikely that one of five letter grades can accurately summarize the entire range of a student's performance. A single letter cannot convey an evaluation of all of the aspects of a student's work—for example, motivation, creative thought, written and oral skills. Furthermore, grades are not even a reliable measure of quality across a broad range of courses. Since grades in the present system cannot adequately reflect a student's performance, these grades appearing on a transcript cannot communicate effectively to an outside agency.

The letter grade system, at present, does little to encourage intellectual development, and at times can even foster educationally dysfunctional situations. By their nature, letter grades do not elicit a thorough evaluation of all aspects of course work. As a result, many aspects can be overlooked. The professor may rely on indicators which do not completely reflect achievement. The student may place greater importance on grades than on development of creative and critical thought.

This misplaced emphasis on "grade-grubbing" (students directing their activities toward receiving a specific grade for the sake of the grade) breeds extreme feelings of competitiveness among students, revolving solely around grades. This differs from intellectual competition which may be beneficial to scholarships, in that there is often no sense of underlying achievement. Phenomena such as these have no place in a University. Another problem is the creation of extremely stressful situations for students who find themselves on the borderline between two grades; a distinction which is actually only arbitrary.

The Proposal

We recommend a new grading system—one which provides both more freedom for the students and more comprehensive, rigorous evaluations. This system will consist of an internal and external track. The external track is designed to facilitate communication with graduate and professional schools and corresponds to the present "official transcript." The internal evaluation is designed to provide the extensive, honest analysis of students' work which, as we have shown, is lost under the present system.

The base of our system, which will appear on the external track is Satisfactory/No Credit ratings in all courses. Additionally, students may opt to receive letter grades in individual courses. Students shall make their choice of the type grade to be recorded for each course during registration. Furthermore, they may take any number of courses on either a grade or Satisfactory/No Credit basis.

Grades will be given on the following scale: A (distinction),

B (good), C (pass). Courses failed shall receive No Credit and will not appear on the external transcript, since grades should serve an evaluative rather than a punitive function.

We recommend the following minor changes: abolition of the "D" and extension of the change period (i.e. from grade to S/NC or vice versa) to mid-term.

Explanation

As Satisfactory/No Credit is the base of our system, written evaluations (the internal track) must be the heart. We recommend that the written evaluations become the primary medium for expressing judgment of student performance. Professors should evaluate students on the criteria of competence, achievement, motivation, and creative thought as evidenced in class participation, written and oral work. These evaluations must be viewed as one of the primary responsibilities of faculty members.

The evaluations are the absolute property of the student. Their value is not in terms of admission to graduate school; they are more valuable than the present system as an *educational tool*. It should be noted that written evaluations are not written recommendations. The evaluations are to be an honest appraisal of a student's work for his own benefit, not geared for outside agencies (i.e. graduate and professional schools). Indeed, if the system is to work, written evaluations must be carefully prepared. SCUE does not see using a system of S/NC as an extension of the existing pass/fail system. The S/NC system is substantiated by the written evaluations. In fact, we believe that our system will give the students a far clearer appraisal of progress than the existing system. We think it necessary to deemphasize letter grades wherever possible and enhance the importance of the evaluations.

We realize that such a system might place a significant new burden on the faculty, but we feel that thorough evaluations are essential for a student's academic growth. Hopefully in the future, reduced class size will alleviate this burden. We have included with this report evaluation forms from Brown University and Antioch College which faculty and students may find to be useful models.* However, these forms are just presented as examples; we encourage further discussion as to the construction of a more effective evaluation form, which might vary from department to department.

We recommend that written evaluations be required in all courses with an enrollment of 30 or fewer students. Detailed evaluations in larger classes will be available to the student upon his request. We strongly recommend that the student request evaluation in any advanced classes. In many large courses, there are recitation sections whose leaders are able to evaluate a student's work thoroughly (e.g. Rel. T. 2). We recommend that all large courses have recitation sections, particularly courses beyond the introductory level because, of the great value of internal evaluations. In large courses without sections, written evaluations are given at the teacher's discretion or on request of a student. If a student is taking a course S/NC, the grade he receives should be communicated to him in the same way as an internal evaluation. Knowing the grade is better than no evaluation at all in a large course.

Under our system, the student shall also submit an evaluation of courses taken. These may be written for all courses or for those of the student's choosing. They shall exist independent of the instructor's evaluation and shall consist of the student's opinion of course material, teaching methods, and his own performance.

Also, students who have taken many courses S/NC and later develop interest in graduate schools may have grades released in the same way as this is done presently.

SCUE finds few convincing arguments for the continued appearance of failures on a student's transcript. We believe that the transcript should be a record of the student's competence and achievements, i.e. those courses in which he shows a satisfactory grasp of the material. However, recording failures on a transcript can only serve to penalize students and there are few educational advantages to such punitive use of grades.

Some may object to the abolishment of the "F" as it might hamper the existing advising system. The notation of NC will be

*Available on request—Ed.

recorded internally, thus keeping students and advisers alert to any failures. Students will be able to gamble on courses and projects they may never have considered before, as they will be able to take intellectual risks and to fail without permanent stigma. Students will receive written evaluations in courses where they have received NC.

The grade of "D", too, serves few useful purposes. Our proposal calls for the grade of C to connote passing work. We see little need for students or faculty to agree on a grade which signifies inadequate grasp of the material.

Implementation and Conclusion

SCUE realizes that our proposals do not answer all of the problems we have raised. Some of the problems involved with letter grades will remain as long as a four point scale is used in any way. We hope that the system we propose will change the emphasis on grades to some extent, viewing them solely as a tool for admissions officers, with little significance for the main evaluation of course work. The problems cannot be eliminated as long as some graduate and professional schools continue to insist on traditional transcripts for admission. Another problem is class size: many advanced level courses have enrollments significantly over 30. In these classes, the evaluation system cannot work as effectively as we might wish.

We propose that our system be adopted for a trial period of two years. During this time, the effects of the system will be assessed, and committees should be charged to:

1) Investigate possibilities for transforming class sizes. At present, the University has a profusion of intermediate size courses. These 30-80 person courses, which are generally lecture courses, provide few educational benefits over larger lectures. SCUE recommends that the University and departments review course offerings in an attempt to minimize the number of these courses. We recommend establishing a small number of large lecture courses, and forming a larger number of small enrollment courses, as suited to the subject matter. No advanced course should be too large for a teacher to do a thorough evaluation of a student's work. We suggest that there be recitation sections in all large courses.

2) Investigate ways of eliminating grade pressure on preprofessional students. The huge numbers of applicants to Law and Medical Schools have led admissions officers to insist on receiving easily quantifiable transcripts with cumulative average and board scores. The quantitative nature of evaluation is one source of the unusual pressure on pre-med and pre-law students. Substantive changes in this area are the only solution we can see to eliminate "grade grubbing."

3) Investigate the possibility of eliminating the 4-point grading scale completely.

4) Investigate the possibility of instituting comprehensive examinations in a field, to replace traditional courses and grades, for those students who might choose this path to a degree.

Workshop 7 of the University's fall Conference on Undergraduate Education was devoted to issues of accreditation and certification. The workshop, chaired by Dr. Kenneth Rothe, reported five recommendations (below) in CUE Report to be published in a forthcoming issue.

RECOMMENDATIONS

1. To focus the goals of the first two years of study and to provide a natural break in the four year program, the Associates of Arts (AA) degree should be awarded.

2. A "minimajor" program be developed. Each minimajor being a set of courses (4-6) from some theme (e.g., 18th Century Romantic Literature, the Renaissance, war, etc.). Three such topic clusters would be required for the A.A. and/or in lieu of distributional requirements.

3. There should be much more certification by examination. This would be appropriate for the minimajor and for the major.

4. The University should offer a B.A. in General Studies. This might particularly suit the needs of pre-medical and pre-law students.

5. Grading and evaluating of students is needed and generally wanted. Means should be found to make it more flexible without making it more dilute.

LETTERS

TRANSLATION

The article by Dr. M. H. Levin in the March 14 ALMANAC contains some rather technical language, e.g.

"A feature of the urban ecosystem is the conspicuous transportation network. . . . portions of this vital circulatory system may function sluggishly at times. Fossil fuel burners bearing the human component to their places of employment within the city may reduce the speed at which fuels, manufactured products and services are imported into the urban ecosystem." In the interest of improved interdisciplinary communication, which the University so fervently desires, I submit a translation of the above:

"Automobiles carrying people to work may get in the way of trucks."

Further insights into the functioning of the urban ecosystem are eagerly awaited. —Michael Cohen, Associate Professor of Physics

UNCONSCIOUS PREJUDICE

Steve Mann sounded quite sincere in the March 7 issue about rectifying "implicit, often unconscious, prejudices." I wonder if he caught his own prejudices at work in the sentence ending ". . . it would be unwise for us to set a minimum quota for women and thereby admit less-qualified students." Elsewhere Mrs. Bunting is quoted as saying that of all high school graduates scoring in the top ten per cent by ability tests, at least 97 to 99 per cent of those who did not go on to college were female. If we made welcome some of the 97 to 99 per cent, might we not thereby risk raising our quality?

—Adelaide Delluva, Associate Professor of Biochemistry (Vet)

OF RECORD



TERM PAPER COMPANIES

Following is the text of a memorandum from the Vice Provost for Undergraduate Studies, sent to all Academic Deans and Vice Presidents on March 2, 1972.

In recent months there has grown up in Philadelphia and elsewhere a sizeable commerce in the sale of term papers and so-called background research. For a price, students can obtain term papers on almost any subject, either in final draft or in the form of raw information. The companies selling them make extensive use of student assistance (and on occasion that of faculty members) in the writing of such term papers for sale.

Cooperation with companies aimed at subverting educational processes is clearly contrary to the aims and ideals of our university. Students who sell their own work or that of others to such companies or are employed by them risk severe disciplinary action.

A student who submits a term paper sold to him by such a company is in clear violation of the University's standards of academic responsibility and should be proceeded against accordingly. In the case of papers prepared using as a source research by such a company, the normal criteria for the determination of plagiarism (e. g., failure to acknowledge source, secondary as well as primary) should be applied.

An additional problem, reported in the national press but so far not evident at this University, is the theft of term papers and their subsequent sale to term paper companies. Faculty members should be aware of this abuse and guard against it.

—Humphrey Tonkin,
Vice Provost for Undergraduate Studies

IN PRINT

THE DRINKING MAN'S PROVOST

A PAIR OF LAWN SLEEVES

A Biography of William Smith (1727-1803)
by Thomas Firth Jones

The author is a graduate of Washington College whose publications include a serialized History of Philadelphia and a novel, Stairway to the Sea.

"William Smith, M.A., Aberdeen" was the way the University of Pennsylvania's first Provost signed his correspondence. Yet in all his academic life, which began when he entered Kings College, Aberdeen, aiming for holy orders, he earned neither a degree (except for honorary titles in later years) nor the orders he coveted. His reasoning was sound enough: who on earth would ever check with a university 3000 miles away?

Noted for his moral aberrations and often described as drunken, niggardly and bellicose, William Smith was also recognized as one of the greatest educators of the 18th Century. After his arrival in America, he put his keen mind, his gift for oratory and his sheer opportunism to work and was soon an intimate of the Penn family, Benjamin Franklin, David Rittenhouse and others of social and historical importance.

Founder and nurturer of colleges (the College of Philadelphia which later became the University of Pennsylvania, and Washington College), Smith led a "roller-coaster existence of accomplishment and defeat," renowned for his scholastic accomplishments and damned for his personal habits.

His paradoxical existence is apparent in his relationship with Benjamin Franklin. Once mutually appreciative friends, Smith and Franklin became political enemies in Philadelphia and, even after Franklin agreed to hire Smith as head of the College of Philadelphia, they vilified each other in public and private until Franklin's death. Ironically, it was Smith who was then asked to give the eulogy.

The title of the book comes from Smith's great ambition to be the first Episcopal bishop in America. He was nominated, but before he could be consecrated he acted as chairman of a church convention in New York and "got so drunk that no one ever suggested him for the lawn sleeves again."

In this in-depth study of a complicated man, the eccentric and contradictory William Smith stands out clearly. So does William Smith the educator: a brilliant man, outstanding preacher, teacher, astronomer, writer and politician. *Chilton Book Company, 201 pp. \$6.50*

PAPERBACKS FROM THE UNIVERSITY PRESS

Highlights of the Fall, 1972, selection from University Press include the paperbacks described below. Press books can be ordered from the University Bookstore or from the Order Department of the Press. The latter requires full payment with order.

THE EXPLORATION OF THE INNER WORLD

A Study of Mental Disorder and Religious Experience
by Anton Boisen

"To be plunged as a patient into a hospital for the insane may be a tragedy or it may be an opportunity. For me it has been an opportunity."

With this somewhat startling premise, Anton Boisen begins what has been called "one of the most important contributions to the study of the psychology of religious experience since the publication of William James' *Varieties of Religious Experience*."

Boisen's hypothesis is that there is a definitive relationship between acute mental illness of the functional type and religious experience. He examines the experiences of "inner defeat" and of "inner victory" (when attempts at inner reorganization are successful, they are, he says, called "religious experience" while unsuccessful attempts are commonly spoken of as "insanity") using, as examples, his own experiences as an institutionalized victim of "catatonic dementia praecox" and those of others "who have been forced off the beaten path of common sense and have traveled through the little-known wilderness of the inner life."

Part I of Boisen's book is the result of 10 years of research and it is the foundation on which he bases his theoretical implications.

The value of the book, obviously, lies in the perspective from which it was written. It is, in the author's words, "the report of one who has himself explored the country which he describes" and as such should be of interest not only to psychiatrists and theologians but to anyone interested in pursuing the dark corridors of the innermost mind of man.

336 pp. \$3.95 P

DEPRESSION

Causes and Treatment

by Aaron T. Beck M.D.

The author is a Professor of Psychiatry in the School of Medicine and Chief of Section, Department of Psychiatry, Philadelphia General Hospital.

Depression ranks as one of the major health problems of today. Yet there are still major unresolved issues regarding its nature, its classification and its etiology.

"Is depression a type of reaction or is it a disease . . . is it caused primarily by psychological stress and conflict or is it related primarily to a biological derangement?"

There are no universally accepted answers to these questions according to the author who has extracted from the mass of research on the subject "a group of representative studies of the clinical, biological, psychological, theoretical and therapeutic aspects of depression."

The importance of depression, however, is recognized by everyone in the field of mental health. According to Kline (1964), and as cited by Dr. Beck "more human suffering has resulted from depression than from any other single disease affecting mankind."

Encompassing as it does a massive array of research done over a 10 year period, Beck's book has been cited as a major diagnostic tool. *The American Journal of Psychiatry* says of it: "Interestingly written, highly informative, well documented and of high scientific quality . . . It makes an important contribution to the psychology of depression."

384 pp. \$4.45 P

PATTERN IN THE MATERIAL FOLK CULTURE OF THE EASTERN UNITED STATES

by Henry Glassie

The author is with Indiana University's Folklore Institute.

"Material culture" consists of artifacts or man-made objects. It "embraces those segments of human learning which provide a person with plans, methods, and reasons for producing things which can be seen and touched."

The American folklorist, says the author, thinks of folklore mainly in terms of oral traditions: the verbal arts or oral literature of all types of culture. This is too limiting a concept, he says, for examining material folk culture.

The student of folk culture must be both field worker and theorist. It is necessary, says Glassie, to know not only what

an object is, its history and distribution, but also what its role in the culture of the producer and user is and the psychology of the carrier of folk traditions.

Thus, Glassie attempts to establish patterns in material folk culture, concentrating on the eastern United States. He draws from diverse areas: architecture, tools, ethnic cookery and many other forms. There is variety within forms, as in his study on wood: log and frame construction, shingle roofing, dugout boats and troughs, rail fencing, animal traps, latches and kitchen utensils of wood.

Most unique in the study of American folk culture and what has inhibited anthropologists from any prior attempts at a comprehensive study of this type, says Glassie, are the operative factors in the development of American style "folk". These include the initial contact of numerous different cultures in an environment to which none was perfectly suited; constant migration; an early change of popular society's base from country to city; farm to factory; a change in the primary cause of isolation from topography to economics and the strain within the many multicultural individuals who carry restrictive and contradictory folk and popular elements in nearly equal amounts.

Glassie says his work is a beginning, an attempt to interest others in a scholarly approach to a long overdue study.

New York Geographical Review calls his book "The first substantive effort to survey the fundamental facts of structure and process in the traditional material culture of what is unquestionably the seminal zone of the country as a whole." 328 pp. \$3.45 P —A.M.G.

IN ACTION

MAPPING THE BEHAVIOR OF BATTERIES

The world doesn't run on batteries, but so many things in it do, says Dr. Leonard Nanis, Associate Professor of Chemical Engineering, that it's time we found out more precisely how they work.

Dr. Nanis has a new optical approach that will permit scientists not only to measure and map out current density profiles in battery electrode systems, but will also allow them to monitor the process continuously under actual battery operation conditions.

The ideal battery, Dr. Nanis says, packs as much energy as possible into a minimum of space—usually via a chemical paste made of powder which stores electrical power and releases it by converting its chemical energy into electrical energy. The basic problem for most types of batteries is that current density isn't spread evenly throughout the storage area, and much of the current gets "lost in the pores" of the paste, or over-concentrates in places so that unwanted reactions occur, sometimes generating explosive gas.

Instead of slicing up discharged batteries into razor-thin sections for chemical analysis of reactants and their products, Dr. Nanis's system uses miniature batteries of varying thicknesses. As they are charged or discharged, changes in light reflected off the rear of the electrode are monitored and measured. The changes in the diffusely reflected light can be correlated with chemical changes occurring deep in the battery structure itself as it reacts to the addition or loss of current.

This diffuse spectral reflectance technique, as it is known, not only makes it possible to map out the local reaction distribution, but permits it to be done rapidly and repeatedly over many cycles without the loss of the original miniature battery.

Dr. Nanis says this method, coupled with the practical engineering of battery systems, should greatly advance the de-

sign, testing, and performance of battery systems for specific applications. The extended knowledge of electrode behavior under actual conditions, he says, will permit rational design of battery plates with specified porosity and structures, whether they are needed for space flights, medical purposes, or industrial use. Also, manufacturers will benefit from cost reductions stemming from decreased need for such expensive catalysts as platinum and silver in batteries.

The current research is being funded by a \$25,000 grant from the Naval Air Systems Command. —Don Fey

REPLACING THE VOCATIONAL ED PATTERN

University faculty and the Philadelphia Board of Education are exploring a new concept in vocational education—"skills centers." To develop the School Board's program for these centers, Dr. Edward B. Shils, Chairman of the Industry Department, recently received a \$25,000, two-year grant from the Haas Community Fund.

Working through the Frederick W. Taylor Management Laboratory at the Wharton School, Dr. Shils will recruit faculty members and graduate students to apply the "systems" approach to develop the program for "skills centers" for the Philadelphia schools.

Dr. Shils indicated that the skills center idea would eventually replace the old pattern of vocational education in high schools. No longer will some high school students be placed on a special track to spend most of their time learning a vocation, while all the other students are devoting most of their school time to the academic subjects. "Now we want all students to know about opportunities in a wide range of vocations," Dr. Shils said.

The assignment of the Haas Fund grant calls on Dr. Shils to implement a feasibility report accepted recently by the Division of Vocational Education of the School District. That report recommends:

1. Integrate the career education program with general education; design programs for all students at all grade levels.
2. Establish a number of skills centers, each of which would serve as extensions of four or five general middle schools and upper schools.
3. Broaden job experience program and placement service by taking advantage of the available facilities and personnel resources of medical, educational, social service, labor, business, industry, and community organizations.
4. Operate three types of skills service centers: industrial short-term training center; business career training center; diversified industrial-technical school.

Some of the skills centers may be in the present schools while others could be in nearby industrial plants or business offices. The present vocational schools may be adapted as skills centers to serve a number of nearby schools.

FORECASTING THE ECONOMY

The U.S. economy is "responding well" to the nation's New Economic Policies, so that real output will increase by 5.65% and unemployment should fall to about 5% this year, the Wharton econometric forecasters have predicted in their regular quarterly analysis, based on continuous monitoring of the economy.

There may be a "bulge" in the inflation rate in the first quarter of this year, but the forecasters at the University of Pennsylvania expect inflation to slow down after that and average between 3 and 3½% for all of 1972.

The full forecast of Professors Lawrence R. Klein, George R. Green, and F. Gerard Adams of the Wharton Econometric Forecasting Associates will appear in the spring *Wharton Quarterly*.

SOCIAL WORK

Teaching and Learning Behind Bars

Depending neither on yesterday's textbooks nor today's newspapers as sole sources, University of Pennsylvania social work students are learning about prisons first-hand—from seven prisoners—in the first course of its kind in the country.

Dr. Jack Sternbach, Associate Professor of Social Work, has arranged with authorities at the State Correctional Institution at Graterford to allow seven inmates to join 20 social work students for a course titled "Issues in Corrections." Directing the course with Dr. Sternbach is Dr. Max Silverstein, Professor of Social Work.

"We have treated prisons as warehouses for social deviants for far too long," said Dr. Sternbach. "These seven inmates will constantly remind us that prisoners are human beings who are very capable of telling us what social work services they need and want."

The Graterford Campus

Eighteen Pennsylvania students petitioned Dr. Sternbach to offer the class after he brought the superintendent and a group of prisoners from Graterford to speak at the School.

Weekly meetings are held at either the School of Social Work or at Graterford prison. Addressing his students, Dr. Sternbach said, "I think that going out to the prison will help our learning. It will be good for us to have that piece of reality shoved at us every other week."

From another point of view Bob Ray, one of the seven participating prisoners, said, "At the prison the class is uneasy because they are not used to it. I am planning to save my hardest hitting comments until we are at the School where the students will be at ease and will really be able to listen and take in what I say."

"This is the first meaningful program that's gotten off the ground at Graterford," continued Mr. Ray. "Social workers must know us and our needs *before* they begin practicing in a prison. When they begin to work for and with the system, it's too late. By that time they see us the way the prison staff does, which at this point is a rather stereotyped picture. We are thought of as a little less than human."

Sternbach set the stage in his first class by citing the statistic that only 2% of all law breakers are in jail. "We cannot consider prisoners a separate category of people. We all commit criminal acts. Think about how many people cheat on their income tax. The main difference between an income tax cheater and a burglar is that one uses a pen and the other uses a crowbar," said Dr. Sternbach.

He also pointed out that once a man enters prison, he has few statutory rights to safeguard him from injustices inside the prison. Under these circumstances it is all too easy even for a social worker to violate a prisoner's basic human rights—and the prisoner has little recourse, according to Sternbach.

In his introductory class Sternbach noted, "Social workers and the literature in social work have viewed corrections as a matter of us (social workers) helping them (prisoners). In this class we are eliminating the two categories, and as a result we will have to create our own course content."

Among the issues under discussion: Should there be structures to limit the power of social workers, lawyers and other service people in the institution?

Do social workers have a right to give treatment to prisoners without their consent?

When a prisoner has a 10- to 20-year sentence how should a social worker affect the length of time the inmate stays in prison?

Is the state wage of 50¢ to \$1.25 per day for prisoner's labor indentured servitude?

What kinds of rights should prisoners have to deal with punishment by prison authorities?

Does prison really solve the problems of criminals or crime?

Prisoners participating in the program are James Pickett, Tony Scoleri, Bob Ray, Bernard Orr, Harry Carey, Larry Lundy and John Parsons. They are all interested in reaching out into the community, their spokesman Bob Ray said, but they need support, because as prisoners they have few rights of their own. "If nothing else happens with this class at least students are coming up to the prison," he added. "Before, no one was coming up."

—Michele Steege

INTERNATIONAL SOCIAL DEVELOPMENT, 1972

An interdisciplinary conference on International Social Development will be held at Penn in April under the auspices of the Rena and Angelus Anspach Institute for Diplomacy and Foreign Affairs.

The first Anspach Conference, in 1969, dealt with Soviet and American Policies in the United Nations. The second one, in April 1971, discussed The Multi-national Corporation in the Global Political System.

On April 20 and 21, 1972, a group of scholars and administrators from the U.N., The World Bank, A.I.D., and from the disciplines of economics, political science, sociology, social work and psychology from the University of Pennsylvania and other universities will examine the social implications of "The Second Development Decade."

This Conference is open to members of the faculty and senior graduate students on the campus of the University. Anyone who wishes to participate should get in touch with the Chairman of the Conference: Professor John S. Morgan, Kenneth L. M. Pray Professor of Social Work at the School of Social Work, Ext. 5518.



April Arts Week

April 3rd-9th

MONDAY APRIL 3	PHILOMATHEAN ART GALLERY Reception 7-9 PM, opening a photographic exhibit which runs to April 14 • Fourth Floor, College Hall	MUSIC DEPARTMENT GALA CONCERT 8:30 PM. Haydn, Rossini, Brahms, Wernick, and Frank, by the University Choir, Penn Contemporary Players, University Orchestra and Choral Society • Church of the Savior, 38th & Ludlow
TUESDAY APRIL 4	Houston Hall Presents A CHAMBER RECITAL 4 PM Tenor, flute, cello and piano works of Bach, Haydn, Schubert, Liszt, Beethoven	UNIVERSITY CHAMBER ORCHESTRA 8:30 PM Symphonies of Boyce and Schubert (#5), Bach's Brandenburg Concerto #4 and Wagner's Siegfried Idyll • Houston Hall West Lounge
WEDNESDAY APRIL 5	POETRY READING 4 PM by winners of the English Department's Spring competition. The Catacombs, Christian Association, 3601 Locust	The Wakefield Resurrection Play 8:30 PM at St. Mary's Church, 3916 Locust by the Church and Penn's Medieval Studies Group
THURSDAY APRIL 6	BALALAIKA ORCHESTRA 4 PM Russian Folk Music in the Houston Hall Bowl Room	A CONCERT OF INDIAN MUSIC 8 PM Rooftop of Harrison House Music Department and South Asia Regional Studies
FRIDAY APRIL 7	Christian Association's SPRING CRAFTS FAIR All afternoon on Locust Walk, or in the CA Auditorium if it rains	UNIVERSITY CONCERT BAND 8:30 PM • 200 College Hall From Beethoven to Sousa with detours many and varied
SATURDAY APRIL 8	• Demonstrations by Craftsmen All Saturday afternoon	Penn Union Council: THE JUILLIARD STRING QUARTET 8 PM • University Museum Auditorium in works of Beethoven, Bartok and Brahms Admission: \$1 campus, \$2.50 public
SUNDAY APRIL 9	THE PENNSYLVANIA SINGERS AND THE PENNSYLVANIA GLEE CLUB 3 PM A bit of everything: haiku and Hindemith, Pete Seeger and Gabriel Faure and Faust St. Mary's Church • 3916 Locust Walk	Hill House Presents A CHAMBER CONCERT AND DANCE PROGRAM 8 PM Hill Hall • 34th and Walnut
ALL WEEK	Work of undergraduates on display 1 to 9 PM daily in Harrison House; graduate students' work on view 10 AM to 5 PM in the Bowl Room of Houston Hall. Art classes open to visitors Tuesday - Thursday 9 AM Hayden Hall. Philomathean Gallery open noon to 6 PM daily. Institute of Contemporary Art's "Topography of Nature" from 9 to 5 daily, 1 to 5 weekends; to-9 Wednesday.	

PENN PLAYERS

Present

Ionesco's
RHINOCEROS

8:00 PM
Wednesday
through
Saturday

•
2:30 PM
Sunday
Houston Hall



JOB OPENINGS

BULLETIN #470 UPDATED 3/22/72

ADMINISTRATIVE ASSISTANT I (3) for medical, dental and student areas.

Qualifications: Knowledge of standard business methods and budget work. Ability to deal with department chairmen, faculty, top level administrators and students. Excellent typing and shorthand required. *Salary Range:* \$6100-\$7600.

CHIEF TELEPHONE OPERATOR for responsible work involving supervision of the University telephone switchboard operation.

Qualifications: High school graduate with at least five years of direct experience in the operation of a multiple position switchboard. Some supervisory experience helpful. *Salary Range:* \$6100-\$7600.

ECG Technician I for medical research department.

Qualifications: Graduation from high school with courses in biology and physics preferred. At least six months' specific training in ECG work in an approved laboratory. Ability to work well with patients and team of co-workers. *Salary Range:* \$4600-\$5600.

RECORDS CLERK II for business office.

Qualifications: Good clerical skills and interest in performing detailed records work; accurate typing. *Salary Range:* \$3600-\$4475.

RESEARCH LABORATORY TECHNICIAN III for a clinical laboratory in a medical teaching and research area.

Qualifications: Graduation from an approved college or university with a degree in Medical Technology or graduation from an approved school for medical technicians with at least three years of experience in a clinical laboratory. *Salary Range:* \$6700-\$8200.

RESEARCH LABORATORY TECHNICIAN V for basic research in enzymology and enzyme engineering.

Qualifications: Graduation from an approved college or university with a major in chemistry or biochemistry. Familiarity with the methodology of enzymology desired. *Salary Range:* \$7700-\$9700.

SECRETARY I (4) in medical, academic and business areas.

Qualifications: Accurate typing; proficiency in spelling, ability to perform varied clerical duties. *Salary Range:* \$4400-\$5400.

SECRETARY II (6) for academic, business and medical offices, recreation and research areas of the University.

Qualifications: Interest in performing varied duties pertinent to the area; good typing, shorthand and dictaphone; some experience required. *Salary Range:* \$5000-\$6250.

SECRETARY III (4) for business, medical and academic related offices on campus.

Qualifications: Ability to work with a minimum of supervision in performing varied responsibilities; interest in working with figures; excellent typing, shorthand and/or dictaphone; related experience required. *Salary Range:* \$5500-\$6750.

SENIOR CLERK for medical office.

Qualifications: Good typing; ability to keep accurate records and deal with people effectively by phone and in person. *Salary Range:* \$3800-\$4675.

TECHNICAL TYPIST for business office.

Qualifications: Fast, accurate typing for technical papers and correspondence; excellent aptitude for mathematical and statistical typing. *Salary Range:* \$4600-\$5600.

TYPIST RECEPTIONIST II in business office on campus.

Qualifications: Ability to use judgment and initiative in answering the telephone and meeting people; good typing skill. *Salary Range:* \$4200-\$5200.

ASSISTANT DIRECTOR OF PERSONNEL Responsible to the Director for the administration of the Salary-Classification and Employment functions.

Qualifications: College degree, preferably in business administration and at least five years of experience in responsible personnel assignment with direct involvement in employment and wage/salary administration. *Salary Range:* Open.

Those interested should contact the Personnel Department, Ext. 7285, for an interview appointment.

—W. Austin Bishop, Assistant Director of Personnel

POSITIONS UPCOMING

Mrs. Alice F. Emerson, Dean of Students, is accepting applications for assistant-level positions expected to open after July 1. Details are available at 117 Logan Hall.

The Office of Student Financial Aid will have a position later this Spring for an Upperclass Aid Officer. Details are available from Director James Shada's office, 201 Logan Hall.

BULLETINS

WASHINGTON: Federal Budget; N.S.F. Directory

The Office of Federal Relations has available for examination the 1973 Federal Budget.

The Office also has the latest Telephone Directory of the National Science Foundation. If you need a number at N.S.F. call Miss Hanrahan on Extension 8911.

—Don Murray

FROM THE HELEN HAY WHITNEY FOUNDATION

Fellowships are available to any properly qualified person in the United States or abroad, up to the age of 35, holding the M.D., Ph.D., or equivalent degree, who is seriously considering a career in biological or medical research. Preference is given to those applicants whose approach more directly relates to connective tissue and its diseases. Fellowships to non-citizens are tenable only in the United States.

Fellowships are awarded for three years. The stipend is \$7,500 per annum, plus \$500 annual increment, plus \$500 for each dependent. Allowance is made in the amount of \$500 per annum for relevant professional pre-fellowship experience. The number of years so accepted is at the discretion of the Foundation.

Applications must be received on or before July 1 for those applying from abroad and by August 15 for those applying from within the United States or Canada. Late applications are not accepted.

Address inquiries to the Helen Hay Whitney Foundation, 66th Street & York Avenue, New York, N. Y. 10021.

ALUMNI AMATEUR PHOTOGRAPHY CONTEST

The General Alumni Society and *The Pennsylvania Gazette* are sponsoring an amateur photography contest for alumni, with entries due April 1.

Competition is in two categories: The University of Pennsylvania (A. Campus Scenes, B. Athletics, C. People, and D. Nostalgia including old photos not necessarily by the photographer who submits them) and Non-University Subjects (A. People, B. Places and C. Special Effects).

Color and black-and-white will be judged separately within categories. Grand prize is a trip for two on a General Alumni Society Tour. For entry blanks and rules of the competition, contact the General Alumni Society, 638 Franklin Building.

ALMANAC: 515 Franklin Building, Ext. 5274

Editor Karen C. Gaines

Assistant Editor Anne M. Geuss