

notre dame report

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the university



campaign for nd gifts

Henry J. Knott, Sr., a longtime Baltimore resident and chairman of the board of the Arundel Corporation, a real estate development firm, has pledged \$4 million to Notre Dame. Knott is leaving the gift's purpose to the discretion of the University's administration. Knott said: "I have the utmost confidence in their leadership and their ability to apply the gift where it will best serve the goals of the institution. Notre Dame, through its academic achievements and fiscal growth, has manifested sound management practices as well as the best in value-oriented education." University President Rev. Theodore M. Hesburgh, C.S.C., said that the specific use of the Knott benefaction will be determined at a later date.

In addition to his position with Arundel, Knott is founder, part owner and chief executive officer for several construction, real estate and development firms. He is or has been a member, director or trustee of more than 40 associations, institutions or organizations.

This gift has brought the Campaign for Notre Dame's total to \$152 million, \$22 million beyond its goal more than one year prior to its expected completion date.

visitors from the soviet union

A delegation of 10 metallurgical engineers and scientists from the Soviet Union visited the Department of Metallurgical Engineering and Materials Science on Oct. 23. Sponsored by American industry, their United States tour consisted of visits to various industrial facilities, except for their visit to Notre Dame.

new advisory council members

--Joseph C. Cassini III, an attorney in West Orange, N.J., has been named to the Law School Advisory Council. Cassini received his bachelor's degree from Notre Dame in 1972 and an MBA-JD degree in 1976.

--Morrison A. Conway, Jr., a 1954 Notre Dame graduate and owner of Progress Quarries, Inc., in Beaverton, Ore., has been appointed to the College of Arts and Letters Advisory Council.

--Mrs. Terrence J. (Mary Loretto) Dillon, of Winnetka, Ill., has been named to the Art Gallery Advisory Council.

--John E. Echlin, retired chairman of the board of Echlin Manufacturing Company now living in Boca Raton, Fla., has been appointed to the College of Business Administration Advisory Council.

--Joyce Hank, wife of Bernard J. Hank, Jr., chairman of the board for Montgomery Elevator Company of Moline, Ill., has been named to the Art Gallery Advisory Council.

--Dorothy McHugh, a literary agent living in Chicago, has been named to the Memorial Library Advisory Council. Mrs. McHugh is the widow of James W. McHugh, a 1937 Notre Dame graduate.

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memorial library hours thanksgiving vacation

Wed., Nov. 21	
1st and 2nd floors	8 a.m.-5 p.m.
Tower	8 a.m.-10 p.m.
Thurs., Nov. 22	BUILDING CLOSED
Fri., Nov. 23	
1st and 2nd floors	8 a.m.-5 p.m.
Tower	8 a.m.-10 p.m.
Sat., Nov. 24	
1st and 2nd floors	8 a.m.-5 p.m.
Tower	8 a.m.-10 p.m.
Sun., Nov. 25	RETURN TO REGULAR SCHEDULE

nd-leuven faculty exchange set

Notre Dame and Katholieke Universiteit Leuven in Belgium have established a faculty exchange program with distinguished senior faculty from outstanding departments.

The two internationally known Catholic universities will exchange one faculty member per year for a visit of one semester's duration. According to Provost Timothy O'Meara: "We have entered this agreement in recognition of the benefits to educational and research programs that come from a structured program of faculty exchange, especially one which crosses national and cultural boundaries."

Leuven, located just outside Brussels with an enrollment of 18,000, is the Dutch-speaking descendant of the Catholic University of Louvain, founded in Flanders in 1425 by Pope Martin V.

O'Meara explained that while eligibility for the exchange is university-wide, consideration will also be given to building cross-university strength in three or four small, well-defined fields of research.

enrollment statistics

According to figures compiled by the Registrar's Office on Sept. 21, some 8,768 students are enrolled this fall at the University. The figure includes 6,931 undergraduates, 1,204 graduate students, 150 students in the Master's of Business Administration (MBA) program and 483 Notre Dame Law School students.

The total is a slight increase over the previous two academic years, although the number of graduate students is fewer than in several years. The number of undergraduates is the highest in recent years and the University has announced it will increase the student body over the next few years by 500 women undergraduates. The undergraduate population now includes 5,273 men and 1,658 women, and 176 students in the University's seven foreign study programs. There are 1,618 freshmen, 1,671 in the College of Arts and Letters, 1,597 in Business Administration, 1,127 in Engineering and 875 in Science.

The Law School total, with 336 men and 147 women, also includes 35 students in its London Program. The graduate school, with 843 men and 361 women, consists of 431 students in humanities, 249 in the social sciences, 232 in science, 152 in engineering and 140 students in other graduate programs. The MBA program has 116 men and 34 women, bringing the University total to 6,568 men and 2,200 women.

Figures compiled by Rev. Thomas C. Tallarida, C.S.C., director of the University's International Student Affairs Office, list some 273 international students: 90 undergraduate and 183 graduate. These students come from 63 countries, with almost half coming from six countries: Canada (28), Hong Kong (10), India (32), Mexico (12), Peru (16) and Taiwan (32). Each of the other 57 nations is represented by fewer than 10 students.

The graduate students include 57 in arts and letters, 22 in business administration, 49 in engineering, 54 in science and one in the law school. The undergraduates include 8 in arts and letters, 15 in business administration, 28 in engineering, 3 in science and 36 in Freshman Year of Studies.

faculty notes

honors

Adam S. Arnold, associate professor of finance, received a Scroll of Appreciation from the American College, Bryn Mawr, Pa. Arnold also received an Appreciation Award from the South Bend Public Transportation Corporation.

Rev. Robert J. Austgen, C.S.C., director of the Summer Session, has been elected president of the Association of University Summer Sessions. As past-president of the North Central Conference of Summer Schools, Fr. Austgen also has been appointed as a permanent board member of the American Summer Session Senate.

Linda S. Beard, assistant professor of English, has been awarded a grant from the American Council of Learned Societies for participation in the January 1980 Association of Commonwealth Literature and Language Studies International Conference in Fiji.

Harvey A. Bender, professor of biology, has been appointed chairman of the Site Visitation of the Department of Health, Education and Welfare. This team will visit and evaluate the first year program of the National Clearinghouse for Human Genetic Disease. Bender was also chosen to represent the Genetics Division of the Bureau of Maternal and Child Health of the Department of Health, Education and Welfare at the National Session of the Biological Sciences Curriculum Study held at the BSCS National office in Boulder, Colo., Nov. 1-3. Recently Bender was elected a Sigma Xi Director-at-large to serve until Dec. 31, 1982 at the annual meeting of Sigma Xi.

Msgr. John J. Egan, special assistant to the President and director of the Center for Pastoral and Social Ministry, was invited by President Jimmy Carter to attend a reception for Pope John Paul II at the White House on Oct. 6. Egan is the first Catholic priest to receive one of the annual awards for outstanding ministry from the Protestant Committee on Urban Ministry, which held its fall conference at Notre Dame Oct. 21-24.

Philip J. Faccenda, University general counsel and concurrent professor of law, has been appointed to the Citizens Board of Loyola University of Chicago by its president, Rev. Raymond Baumhart. Faccenda has also been elected chairman of the Indiana Educational Facilities Authority.

Astrik L. Gabriel, director of the Frank M. Folsom Ambrosiana Microfilm and Photographic Collection and part-time professor emeritus of the Medieval Institute, has been honored by a printed dedication as "the great expert in history of medieval manuscripts and European universities" in a folio-sized book published in the series of the Bavarian Academy of Sciences, Philosophical-Historical Section, Munchen 1979, entitled Canons Regular and the Pastoral Care of the Church and Society in the XIth Century, authored by Professor Karl Bosl, at the University of Munchen.

John J. Gavin, adjunct associate professor of microbiology, has been selected to receive the 1979 Handicapped Hoosier of the Year Award. He was honored at the Governor's Award Luncheon on Oct. 19 for his outstanding endeavors on behalf of the handicapped.

Moirra M. Geoffrion, assistant professor of art, received the "Best of Show" award for her oak and handmade paper work, "A Paper's Space," at the

Elkhart Regional Juried Art Exhibition on display in October.

Richard W. Greene, associate professor of biology, was elected chairman-elect of the Ecology Division of the Indiana Academy of Science at the annual meeting held Oct. 19 at Manchester College, North Manchester, Ind.

Rev. Theodore M. Hesburgh, C.S.C., University President, has been appointed by President Carter to head the Select Commission on Immigration and Refugee Policy established last year by Congress. Hesburgh received the College Board Medal for distinguished service to education at ceremonies in New Orleans, Oct. 29.

Douglas Kinsey, associate professor of art, won a third award for his oil on canvas work, "Anima/Animus," at the Elkhart Regional Juried Art Exhibition, on display in October.

George C. Kuczynski, part-time professor emeritus of metallurgical engineering, has been selected by the Lehigh Valley Section of the American Ceramic Society as the 1979 recipient of the Hobart M. Kraner Award. The award honors distinguished achievements in the field of ceramic materials.

David C. Leege, director of the Center for the Study of Man in Contemporary Society and professor of government and international studies, is one of two external educators chosen to be on the advisory board of the Committee on University Priorities and Planning at Valparaiso University.

Thomas G. Marullo, assistant professor of modern and classical languages, has been awarded a grant from the American Philosophical Society for the project, "Heralding Russian Realism: The Natural School as an Aesthetic Subculture in the Literary World of Saint Petersburg (1840-1849)."

Ralph M. McInerney, Grace Professor of Medieval Studies and director of the Maritain and Medieval Institutes, has been named to the nominating committee of the Metaphysical Society of America, to the program committee of the American Maritain Society and to the Conseil Scientifique of Institut International Jacques Maritain.

Kenneth W. Milani, associate professor of accountancy, has been reappointed to serve as the editor of the American Taxation Association Newsletter for 1979-1980. Milani also was chosen to be a member of the editorial board of the charter issue of the Journal of the American Taxation Association, published in August 1979.

Morris Pollard, chairman and professor of microbiology and director of Lobund Laboratory, has been invited to serve on the Argonne Universities Association Review Committee for the Biological and Medical Research Division at Argonne National Laboratory.

James H. Powell, assistant director and assistant professional specialist in the Center for Continuing Education, has been appointed to the Discussion and Debate Committee of the National University Extension Association.

David N. Ricchiute, assistant professor of accountancy, has been named Coopers & Lybrand Research Fellow in Accountancy at Notre Dame. The appointment, effective for one year beginning Sept. 1, entails a partial release from teaching responsibilities and receipt of research support.

Kenneth F. Ripple, director of the White Center for Law, Government and Human Rights and associate professor of law, has been appointed to the National Advisory Committee on Law Clerk Selection of the Chief Justice and to the subcommittee of the New York State Bar Association to study the convention method of amending the Federal Constitution.

Norlin G. Rueschhoff, chairman and associate professor of accountancy, was elected vice chairman of the American Accounting Association International Accounting Section at its annual meeting in August.

Julian Samora, professor of sociology and anthropology, received the La Raza Award "for outstanding and meritorious service and demonstrated commitment to promoting and improving the status of Hispanics in the U.S." from the National Council of La Raza in Washington, D.C., Sept. 8. Samora was also honored by the National Endowment for the Humanities for his contributions to Hispanic scholarship in the humanities in America at a luncheon at the U.S. Capitol, Oct. 10.

J. Kerry Thomas, professor of chemistry, was elected vice chairman of the 1981 Gordon Conference in Micellar Catalysis and chairman of the 1983 conference.

Anthony M. Trozzolo, Huisking Professor of Chemistry, has been appointed to a three-year term on the Canvassing Committee for the Nobel Laureate Signature Award administered by the American Chemical Society.

Donald G. Vogl, associate professor of art, won a second award for his acrylic on canvas work, "Journey Back," at the Elkhart Regional Juried Art Exhibition, on display in October.

F. Ellen Weaver, assistant of theology, has been elected to the board of directors of the College Theology Society.

Ronald Weber, professor of American studies, has been elected to a two-year term as vice president of the Ohio-Indiana chapter of the American Studies Association.

activities

Donald N. Barrett, associate professor of sociology and anthropology, gave a keynote address on "The American Catholic Family" at the annual regional meeting of family agencies in Buffalo on April 7; he also conducted seminar sessions on varied topics at the same meeting. On July 12 Barrett gave a paper on "Natural Family Planning" at the Task Force meeting of the Northern Indiana Health Systems Agency in South Bend. On Aug. 4 he discussed the same topic with the Board of Directors of NIHS in Plymouth. At the annual meeting of the Association for the Sociology of Religion Barrett chaired one session and presented a research paper on "Family Size in Slum Barrios of Colombia," Aug. 28, in Boston.

Stephen M. Batill, assistant professor of aerospace and mechanical engineering, presented a paper, "The Development of Design Criteria for a High-Speed Flow Visualization Facility--A Preliminary Report," at the 52nd Semiannual Meeting of the Supersonic Tunnel Association held at Notre Dame, Sept. 13. Batill also conducted an invited seminar, "Smoke Flow Visualization Techniques" for the Propulsion Aerodynamics Branch of the NASA Lewis Research Center, Cleveland, Ohio, Oct. 11.

Joseph P. Bauer, associate professor of law, participated in a panel discussion on "Civil Liberties in the Public Schools," at Notre Dame Law School, Sept. 26.

Linda S. Beard, assistant professor of English, presented a paper, "Fragmentation and Disintegration in the Southern African Novel: Bessie Head's *A Question of Power*" for the Southern African Research Association Annual Conference, University of Maryland, College Park, on Oct. 6.

Salvatore J. Bella, Jones Professor of Management, served as dean of the Institute of Management sponsored by the National Association of Retail Dealers of America at the Notre Dame Center for Continuing Education, coordinating the conference and making presentations of the following topics: Problem-solving, Time Management, Leadership, Business and the Environment, and Motivation, Aug. 12-16. Bella also directed and participated in an executive development program for owner-managers of small businesses at the University of California, San Diego, Aug. 19-23.

James O. Bellis, associate professor of sociology and anthropology, delivered a research report on the archeological activities of the Notre Dame archeology field school of the summer of 1978 entitled "Archeological Survey of the Kankakee Valley: First Year" at the 12th Northern Indiana History Conference, held at the South Bend Century Center, Sept. 22.

Harvey A. Bender, professor of biology, spoke on "The Concept of 'Genetic Health'" at Hope College, Holland, Mich., on Sept. 26 as part of a series of public lectures and discussion on "Caring and Curing: The Humanities and Medicine." On Oct. 21 Bender

participated in a panel discussion on "The Sciences and the Humanities in an Age of Crisis" at the 1979 annual meeting of Sigma Xi, the scientific research society, held at Abbey-on-Lake Geneva, Fontana, Wis.

Thomas P. Bergin, dean of continuing education and professor of management, spoke on "The Arts and Education" to the Chief State School Officers and the Alliance for Arts Education Summit Conference at the Kennedy Center, Washington, D.C., on Sept. 27.

John G. Borkowski, professor of psychology, and John Cavanaugh (University of Minnesota), presented a paper on "Metacognition and Intelligence Theory" at a NATO Conference on Intelligence and Learning held in York, England, July 16-20. On Oct. 25-26, Borkowski delivered an address at the University of Wisconsin on "Signs of Intelligence: Strategy Generalization and Metacognition" in connection with a conference on the Growth of Insight in Children.

Samir K. Bose, associate professor of physics, presented a seminar on "Automorphisms of Canonical Systems" while serving as visiting associate professor in the Department of Mathematics of Ben Gurion University, Beersheva, Israel, Aug. 14-30.

Milton Burton, professor emeritus of chemistry, presented an invited talk on "Nuclear Energy: Origins in the Forties" at a convocation at Goshen College, Goshen, Ind., on Sept. 28.

Theodore J. Crovello, chairman and professor of biology, presented the following talks at the Indiana Academy of Science meeting held at Manchester College, North Manchester, Ind., on Oct. 19: "Relations Among Geographic Areas and Numbers of Species of the Brassicaceae" and "Distribution and Boundaries of Trees in Several Midwestern States" (with Thomas Seasley). Crovello also spoke on "Characteristics of Basic Data Matrices and Their Effect on Numerical Taxonomic Analyses at the Numerical Taxonomy Conference held at Harvard University, Cambridge, Mass., on Oct. 25-29.

Michael J. Crowe, professor in the General Program of Liberal Studies, presented a paper, "The Idea of a Plurality of Worlds in Early Nineteenth-Century America" at the Institute for the History and Philosophy of Science and Technology at the University of Toronto on Oct. 5.

Jay P. Dolan, director of the Center for the Study of American Catholicism and associate professor of history, spoke on "The American Catholic Community in a Changing Society" at an academic symposium held at Boston College on Sept. 23 to commemorate the 150th anniversary of the publication of the *Boston Pilot*.

James P. Dougherty, associate professor of English, spoke on "Broadacres City: Frank Lloyd Wright's Utopia" at the Seventh Biennial Convention of the American Studies Association in Minneapolis, Sept. 29. On Oct. 19 Dougherty presented a paper, "A Shift in the Forms of Urban Magnificence," at a

conference on Rome in the Renaissance sponsored by the Center for Medieval and Early Renaissance Studies at the State University of New York, Binghamton.

John G. Duman, assistant professor of biology, chaired a session "Comparative Physiology of Temperature Adaption" and presented a paper, "Freeze Tolerance of Larvae of the Pyrochroid Beetle, *Dendroides Canadensis*" at the American Physiological Society meeting in New Orleans, Oct. 15-18.

Fernand N. Dutile, professor of law, participated in a panel discussion on "Civil Liberties in the Public Schools" at the Notre Dame Law School, Sept. 26.

William F. Eagan, associate professor of management, and David J. Dryer, third year student, Notre Dame Law School, presented a paper on "Landlord and Tenant: Rights and Responsibilities, with Particular Application to Indiana," at the 50th Annual Meeting of the American Business Law Association, Hot Springs, Ark., on Aug. 17.

Msgr. John J. Egan, special assistant to the President and director of the Center for Pastoral and Social Ministry, gave the introductory remarks at the 10th anniversary celebration of the Campaign for Human Development in Chicago on Oct. 4. On Oct. 7 Egan spoke on "Ten Years of Sharing Between City and Suburban Parishes" at the 10th anniversary celebration of the Sharing Program of the Archdiocese of Chicago, at Presentation Parish, Chicago. Egan also gave introductory remarks at the Catholic Committee on Urban Ministry annual conference at Notre Dame, Oct. 21-24.

Kenneth Featherstone, professor of architecture, presented a paper on "Masonry and the Humanization of Work" to the Fifth Annual International Brick Masonry Conference held in Washington, D.C., Oct. 7-10.

Linda C. Ferguson, assistant professor in the General Program of Liberal Studies, produced and hosted the following hour-long broadcasts in the "Sonic Discoveries" series on WSNF-FM: "Chromatic Freedom," Sept. 7; "The Gentle Revolution," Sept. 14; "The Musical Liberation of Paris," Sept. 21; "Moondrunk Adventures," Sept. 28; "A Breath of Air," Oct. 5; "Expressionism Intensified," Oct. 12; "Serialism in Diverse Domains," Oct. 19 and "Discovering Musical Roots," Oct. 26.

Nicholas F. Fiore, chairman and professor of metallurgical engineering and materials science, presented a talk on "Environment-Related Failure of FCC Alloys" at the Department of Metallurgy University of Illinois (Urbana) on Oct. 16, and at the Materials Science Division, Argonne National Laboratory, Argonne, Ill., on Oct. 23.

Edward A. Fischer, professor emeritus of American studies, gave the Thomas Merton Lecture, "Aging as a Delayed Vocation," before Trappists at the Abbey of Gethsemani in Kentucky, Oct. 13. He delivered the Paul Speckbaugh Lecture, "Characteristics of Good Design," at Saint Joseph's

College, Rensselaer, Ind., Oct. 18.

Durland Fish, postdoctoral research associate in biology, presented two papers at the Indiana Academy of Science meeting held at Manchester College, North Manchester, Ind., on Oct. 19: "The Use of an Ovitrap Grid to Measure Adult Movement and Population Density in the Treehole Mosquito *Aedes Triseratus*" (with William Berry) and "The Influence of Organic Substrates upon Oviposition Site Selection in the Mosquito *Culex Restuans*" (with Bridget Hoban).

Denis Goulet, O'Neill Professor of Education for Justice, appeared on two panels at the "Mid-Continent Dialogue on a Changing World Economy," held in Minneapolis, Minn., Sept. 13-15; served as resource person on two panels at the conference on "The Role of Churches in International Affairs," sponsored by the World Peace Foundation in Quebec, Canada, Sept. 26-28; and participated in the colloquium on "The Right to Development at the International Level," organized by The Hague Academy of International Law, held at the Peace Palace, The Hague (the Netherlands), Oct. 16-18.

Paul R. Grimstad, assistant faculty fellow of biology, presented two papers, "An Arbovirus Serosurvey of 10,000 Hoosiers" and "Human Arboviral Encephalitis Surveillance Procedures: How Adequate are They?" at the 14th annual meeting of the Ohio Mosquito Control Association held at the Mohican State Park Lodge, Oct. 24-25.

John A. Halloran, assistant professor of finance, served as lecturer and chairman for a Call Report Clinic in Albany, N.Y., on Sept. 11, and for another Call Report Clinic in Cincinnati, Ohio, on Sept. 13. Both were sponsored by the Bank Administration Institute. Halloran also was a faculty fellow at the School of Mortgage Banking in Palo Alto, Calif., Aug. 6-10.

Stanley M. Hauerwas, professor of theology, spoke on "Parental Rights and Responsibilities for Genetic Health" at Hope College, Holland, Mich., on Sept. 26 as part of a series of public lectures and discussion on "Caring and Curing: The Humanities and Medicine."

Ronald A. Hellenthal, assistant professor of biology, presented a paper, "Automated Taxonomic Procedures Applied to a Revision of the *Geomydoecus* Lice from Pocket Gophers of the *Thomomys bottae-umbrinus* Complex" at the Indiana Academy of Science meeting held at Manchester College, North Manchester, Ind., on Oct. 19.

Rev. Theodore M. Hesburgh, C.S.C., University President, visited Pope John Paul II at Castelgandolfo in August and was invited by President Carter to attend a reception for the Pope on Oct. 6 at the White House. The next day Hesburgh attended a meeting of Catholic educators at Catholic University of America in Washington which the Pope addressed.

Linda-Margaret Hunt, assistant professor of biology, presented a paper, "Effects of Precocene-2 upon the Maturation of the Male Reproductive System on *Oncopeltus*" at the American Society of Zoology

Atlantic Conference on Comparative Endocrinology held at the Duke Marine Laboratory, Beaufort, N.C., Nov. 23.

James A. Kargol, assistant professor of metallurgy, gave a talk on "Hydrogen Transport and Embrittlement of a Ni-base Superalloy" at the Corrosion Laboratory of the Department of Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, Mass., on Oct. 24.

Michael G. Katona, associate professor of civil engineering, presented an invited paper, "New Concepts and Analytical Evaluation of Soil-Steel Structures" at the 32nd Annual Canadian Geotechnical Conference, Quebec City, Quebec, Canada, Sept. 28.

Bernard J. Kilbride, professor of finance, spoke on the demographic outlook for the RV industry to the RVIA National Congress on Recreation Vehicle Finance in San Francisco, Calif., July 27.

John R. Lloyd, professor of aerospace and mechanical engineering, presented a paper, "Subhemolytic Damage to Red Blood Cells due to Elevated Shear Stresses," at the annual Conference on Engineering in Medicine and Biology held in Denver, Colo., Oct. 8-10.

Peter J. Lombardo, assistant archivist, gave an invited paper on "Archival Resources for the Study of Sports History," at the annual meeting of the society of American Archivists, Sept. 26, at the Palmer House in Chicago.

John R. Malone, professor of marketing, gave a presentation on "The Economic Environment" to the Wholesale Florists and Florist Suppliers of America, Inc. Young Executives Forum at the Center for Continuing Education, Sept. 8. On Sept. 13 Malone spoke on the business outlook to the members of the Michiana Credit Management Association at the Matterhorn Restaurant, Elkhart, Ind. Malone gave a paper, "Original Cost, Fair Value and Construction Work in Progress" at the Management Conference of the Northern Indiana Public Service Company, at the CCE, Sept. 18. On Oct. 1 Malone gave a presentation on "The Plant Operator as the Clients' Marketing and Advertising Consultant," at the Outdoor Advertising Association of America Sales Seminar at the CCE.

Thomas G. Marullo, assistant professor of modern and classical languages, was a guest on the program "Straight Talk" on Channel 34 public television, in which he discussed contemporary Russia, Sept. 28. On Oct. 10, Marullo presented a paper, "The 'Little Man' as Gogolian Hero: Iakov Butkov's 'The Petersburg Heights'" at the national conference of the American Association for the Advancement of Slavic Studies in New Haven, Conn.

Barbara A. McGowan, assistant professor of American studies, delivered a paper, "The Popular Business Novel of the 1950s: An Approach to American Attitudes toward Work and Success," at the joint meeting of the Midwest Popular Culture and American Culture associations held at Bowling Green State University, Ohio, Oct. 11-13.

Ralph M. McInerny, Grace Professor of Medieval Studies and director of the Maritain and Medieval Institutes, delivered a paper on the "Present Status of Christian Philosophy" at the Aeternis Patris Symposium, University of St. Thomas, Houston, on Oct. 5. On Oct. 7, McInerny attended the Papal Convocation at Catholic University in Washington, and on Oct. 21 McInerny delivered a paper on "Thomas Aquinas: The Reasonableness of Faith," at the Congreso Mundial de Filosofia, Cordoba, Argentina. On Nov. 1 he spoke on "Abelard's Ethics" at Dennison College, Dennison, Ohio.

Vaughn R. McKim, associate professor of philosophy, presented a paper on the social theory of Anthony Giddens in a symposium on "Philosophy and Sociology: Confrontation and Rapprochement" at the University of Dayton, Sept. 26.

Thomas V. Merluzzi, assistant professor of psychology, presented a paper with Mark P. Rodrigues entitled "Initial Perception of Counselor Characteristics: A Replication and Extension," at the 87th Annual Convention of the American Psychological Association, New York City, Sept. 3.

Robert C. Miller, director of libraries, presented an invited paper, "Approvals Plans: 15 Years of Frustration and Fruition," at the 4th International Conference on Approval Plans--Collection Development held in Milwaukee, Wis., on Oct. 29-31.

Thomas J. Mueller, professor of aerospace and mechanical engineering, presented a talk, "Smoke Visualization of Transition in Attached and Separated Shear Layers" at the International Union of Theoretical and Applied Mechanics Symposium on Laminar-Turbulent Transition in Stuttgart, West Germany, Sept. 18. He also presented a talk, "On the Separation Bubble Near the Leading Edge of Airfoils" at Delft University of Technology, Delft, The Netherlands, Sept. 25. Mueller presented a seminar on "The Numerical Treatment of Physiological Flows" at the University of Houston, Houston, Tex., on Oct. 23. He presented seminars on "Smoke Visualization Techniques in Subsonic and Supersonic Flows" and "The Laminar Separation Bubble Near the Leading Edge of Airfoils" at Texas A&M, College Station, Tex., on Oct. 24, and Mueller also spoke on "Smoke Visualization Techniques in Subsonic and Supersonic Flows" at Mississippi State University, Mississippi State, Miss., on Oct. 25.

Pedatsur Neta, associate professional specialist in the Radiation Laboratory, presented a paper "Anion-and Cation-Radicals of Porphyrins and Chlorophyll *a* as Studied by Pulse Radiolysis" at the Miller Conference on Radiation Chemistry held at Nafplion, Greece, Sept. 10-14.

Walter J. Nicgorski, chairman and associate professor of the General Program of Liberal Studies, convened and chaired the panel on "Values In College Teaching: Developmental Perspectives" at the annual meeting of the Society for Values in Higher Education, Dickinson College, Carlisle, Pa., Aug. 12-17.

Bernard P. Norling, professor of history, lectured on "The Influence of Disease on Warfare" at Norwich University, Northfield, Vt., on Oct. 1.

Rev. Edward D. O'Connor, C.S.C., associate professor of theology, lectured on "Christian Community" and "Repentance and Healing" at a Charismatic Conference in Southampton, England, July 30-Aug. 4. O'Connor also spoke at the Eastern Regional Priests' Conference on Charismatic Renewal in New York City, Sept. 20-21 on "The Theological Significance of the Charismatic Renewal" and "The Place of the Priests in the Charismatic Renewal."

Daniel J. Pasto, professor of chemistry, gave an invited lecture on "Cycloaddition Reactions of Allenes: Concerted vs Nonconcerted" before the Department of Chemistry, DePauw University, Greencastle, Ind., on Oct. 4.

Neervalur V. Raghavan, assistant professional specialist in the Radiation Laboratory, presented a paper, "Separation of Isomeric Hydroxypyridines in Aqueous Solution by High Performance Liquid Chromatography" at the International Liquid Chromatography Symposium held in Boston, Oct. 11-13.

Kenneth F. Ripple, director of the White Center for Government, Law and Human Rights and associate professor of law, delivered a presentation on the President's proposed amendments to the Uniform Code of Military Justice at the National Convention of the Federal Bar Association. San Antonio, Tex., Sept. 28.

Bro. Leo V. Ryan, C.S.V., dean of the College of Business Education and professor of management, spoke on "Teaching Ethics in Courses Concerned with Business, Government and Society" before the Conference on Business and Its Environment, sponsored by the American Assembly of Collegiate Schools of Business (AACSB) and the Five University Consortium (of Greater Los Angeles) at the UCLA Graduate School of Management, Los Angeles, July 24.

Rodolpho Sandoval, associate professor of law, spoke on "New Perspectives in Consumer Legislation" to the Junior Arts Club of Dowagiac, Mich., on Oct. 3.

Thomas J. Schlereth, associate professor of American studies, delivered a paper, "Mail-Order Catalogs as Resources in Material Culture Studies" and was a panelist at a session on "Teaching the City and the Region: Comparative Curricula in American Studies Programs" at the Biennial Convention of the American Studies Association, Minneapolis, Minn., on Sept. 28-29.

Wendy Clauson Schlereth, University archivist, chaired a session on "Catholic Archives: Expanding Dimensions" at the 43rd Annual Meeting of the Society of American Archivists, Chicago, Sept. 28.

Robert H. Schuler, professor of chemistry and director of the Radiation Laboratory, presented an invited lecture, "Optical and ESR Spectroscopic Studies on Radiation-Produced Free Radicals" at the Hungarian Academy of Sciences, Budapest, Hungary, on Sept. 19. On Oct. 23, Schuler presented a seminar on "Ion Scavenging Processes in the Radiolysis of Hydrocarbons" at the Oak Ridge National Laboratory.

William P. Sexton, chairman and associate professor of management, presented a paper on "Temporal Influences on the Employee-Institution Orientation," at the annual Institute of Management Sciences Meeting at Myrtle Beach, S.C., on Oct. 4.

Yu-ming Shaw, assistant professor of history, while a visiting specialist with the Academia Sinica in Taiwan from April to July 1979, lectured on Sino-American relations, American diplomacy, and modern Chinese history at National Taiwan University, Chinese National Teachers University, Armed Forces University, Tamkang College, the Chinese Association for Human Rights, and the Academia Sinica. Shaw also presented a paper, "The Sino-American Mutual Defense Treaty of 1954: Its Negotiation, Termination, and Significance" to the Asian and Western Pacific Security Conference, in Taipei, Taiwan on July 3-4.

Clagett G. Smith, professor of sociology and anthropology, with John C. Gessner, presented a paper, "A Multidimensional Analysis of the Correlates of Attitudes Toward Violence: Some Suggestive Implications" at the New York Sociological Association Meetings, New York City, on Oct. 18.

J. Eric Smithburn, associate professor of law, spoke on "Violent Juvenile Crime and the Investigation Officer" at the annual conference of the International Association of Women Police, South Bend, Oct. 11. On Oct. 19 Smithburn lectured on "Recent Developments in Sentencing and Probation" to the appellate and trial judges of Montana at the Montana Judicial Conference, Helena, Mont. Beginning Oct. 21, Smithburn taught a week-long course to trial judges from throughout the U.S. on the "Legal Framework of Sentencing, Probation, Probation Revocation and Diversion" at the National Judicial College, University of Nevada, Reno.

Dennis J. Stark, director and assistant professor of physical education, spoke to coaches on the training and conditioning of swimmers as part of the Competitive Swimming Seminar for Coach, Administrator and Parent Committee Members of the Sport of Swimming in Berwyn, Pa., Oct. 12-14.

James P. Sterba, associate professor of philosophy, presented a paper, "Accountability in Practice" at the Plenary Meeting of the International Association for the Philosophy of Law and Social Philosophy, American Section, held at the University of Texas, Austin, Oct. 12-14.

James R. Stock, assistant professor of marketing, presented a lecture on "Transportation Costs as a Consideration in Air Force Contracts" to HQ/Air Staff of the United States Air Force at the Pentagon in Washington, D.C., on Oct. 9.

C. William Tageson, associate professor of psychology, lectured on "The Psychology of Vocation and Ministry" as part of a lecture series sponsored by the Office of Ministry Preparation at St. John's University and the College of St. Benedict, Collegeville, Minn., Oct. 7.

Lee A. Tavis, C.R. Smith Professor of Business Administration and professor of finance, presented an invited paper, "Allocating Multinational Resources in a Transitional World: Global Inequities and the Corporate Response," at the Conference on Financial Management of Corporate Resource Allocations, Nijenrode, Netherlands, Aug. 8.

Thomas L. Theis, associate professor of civil engineering, presented a paper, "A Unified Approach to Soil Solution Interactions Through the Application of Equilibrium Principles" at the 52nd Meeting of the Water Pollution Control Federation, Houston, Oct. 7-12. He also co-authored a paper, with B.D. Carter and R.L. Irvine, entitled, "Autotrophic Oxidation of Iron (II) by *T. ferrooxidans* in a Sequencing Batch Reactor," at the same meeting. Theis also presented a paper, "Modeling Phosphorus Chemistry in Eutrophic Lake Sediments," at the 2nd Midwest Water Chemistry meeting at the Univ. of Minnesota, Oct. 8 in Minneapolis.

J. Kerry Thomas, professor of chemistry, gave an invited talk, "Catalysis of Reaction by Organized Assemblies" at the American Chemical Society meeting in Washington, D.C., Sept. 5. He also presented an invited seminar, "Photochemistry in Microemulsions" at the Liquid Crystal Institute at Kent State University, Kent, Ohio on Oct. 3.

Penny Van Esterik, assistant professor of sociology and anthropology, presented a paper on "The Infant Formula Controversy in Thailand" for the Council on Thai Studies on Oct. 20, Madison, Wis. Van

Esterik also chaired a panel on the "Symbolic and Subsistence Value of Food in Southeast Asia" for the Midwest Council on Asian Affairs, held at Columbus, Ohio, on Nov. 3, for which she presented a paper, "Sweetened Condensed Soma: The Symbolic Basis of Dietary Innovation."

Rev. Joseph L. Walter, C.S.C., associate professor of chemistry and chairman of preprofessional studies, spoke on "Financing Medical Education: A New Premed Concern," at a conference on Financing Medical Education sponsored by the Robert Woodward Johnson Foundation in Chicago, Sept. 26-28.

Ronald Weber, professor of American studies, presented a paper, "Full of Tomorrow: Journalistic Accounts of Space Exploration," at Interface '79, the annual conference of the Humanities and Technology Association, at the Georgia Institute of Technology, Atlanta, Ga., on Oct. 25.

Rev. Oliver F. Williams, C.S.C., assistant professor of theology, discussed the book he co-authored Full Value, with Dave Barrett on the Channel 34 "Straight Talk" television program, Oct. 10.

Eduardo E. Wolf, associate professor of chemical engineering, presented a paper, "Co Oxidation on α - Al_2O_3 -Supported Chromia Catalysts" at the ACS National Meeting, Washington, D.C., on Sept. 10.

deaths

Francis P. Clark, 43, director of the micro-filming department in the Memorial Library, Oct. 1.

advanced studies

announcement

Appointment of Sponsored Programs Administrator

Ms. Janine S. Andrysiak, an Administrative Secretary in the Office of Advanced Studies, Division of Research and Sponsored Programs (OAS, DRSP), has been appointed to the position of Sponsored Programs Administrator (SPA). She will be working with other SPAs in all aspects of sponsored programs.

Ms. Andrysiak, a native of South Bend, began working at the University in 1970 and has served in several secretarial capacities in the Radiation Laboratory and OAS, DRSP.

She may be reached on Extension 4487.

information circulars

Additional information on all circulars listed below may be obtained by calling the following extensions:

- Extension 7432, for information on federal government programs.
- Extension 7433, for information on private foundations, corporations and state agencies.

New York State Herbert H. Lehman Graduate Fellowships Social Sciences, Public Affairs or International Affairs, 1980-1981

No. FY80-61

Program:

Study in a college, public or private, in New York State in an approved program leading to a master's degree or to a doctoral degree in the social sciences or public affairs or international affairs.

Eligibility:

- Must have been a legal resident of the United States since Sept. 1979.
- Must have received the baccalaureate degree not later than Sept. 1980.
- Must not yet have entered upon any graduate study prior to July 1980.

Stipend:

\$4,000 for the first year and \$5,000 thereafter.

Tenure:

A maximum of four years, but not exceeding the period of study that would normally be required by the recipient to complete the requirements for the doctoral degree.

Deadline:

March 21, 1980.

For detailed guidelines and application form contact:
The Office of Advanced Studies, Division of Research
and Sponsored Programs Or

State Education Department
Bureau of Higher and Professional Educational
Testing
Cultural Education Center
Albany, NY 12230

National Research Council Postdoctoral Awards for Research in Federal Laboratories Biological, Medical and Behavioral Sciences

No. FY80-62

The National Research Council Research Associateship Programs offer postdoctoral scientists and engineers opportunities for basic and applied research in various federal laboratories and fields. Stipends begin at \$18,000 a year for recent doctoral graduates, with higher stipends for advanced doctorals. Advanced doctorals must have held the doctorate for at least five years at time of application.

For details on federal organizations cooperating in the program and a list of areas of research for 1980, contact the Office of Advanced Studies, Division of Research and Sponsored Programs.

Deadline:

Completed applications must be postmarked not later than Jan. 15, 1980.

National Research Council Postdoctoral Awards For Research in Federal Laboratories Chemistry, Engineering, Mathematics and Earth, Physical and Space Sciences

No. FY80-63

The National Research Council Research Associateship Programs offer postdoctoral scientists and engineers opportunities for basic and applied research in various federal laboratories and fields. Stipends begin

at \$18,000 a year for recent doctoral graduates, with higher stipends for advanced doctorals. Advanced doctorals must have held the doctorate for at least five years at time of application.

For details on federal organizations cooperating in the program and a list of areas of research for 1980, contact the Office of Advanced Studies, Division of Research and Sponsored Programs.

Deadline:

Completed applications must be postmarked not later than Jan. 15, 1980.

**President's Commission
on White House Fellowships
White House Fellowships**

No. FY80-64

Program:

White House Fellows are full-time Schedule A employees of the federal government and work in a Cabinet level agency, in the Executive Office of the President, or with the vice president for one year. In addition to serving as special assistants performing various duties, the fellows meet periodically in educational meetings with top-level government officials for discussions.

Qualifications:

There are no educational requirements, and no special career or professional categories are favored. Applicants should be in the early and formative years of their career and should be able to demonstrate some degree of community involvement and commitment.

Deadline:

Dec. 1, 1979.

Application:

For application materials and additional information, contact:

President's Commission on White House Fellowships
P.O. Box 7737
Washington, D.C. 20044
Telephone: (202) 653-6263

**State of Indiana
Commission for Higher Education
FY1980 Title I-A Community Service
and Continuing Education Program**

No. FY80-65

Although Indiana's allocation for the Title I-A program has not been determined at this date, listed below is a timetable and priority areas for 1980. Proposal guidelines should be available in January or February, for a submission date in March or April.

There will be six new priority areas for 1980. One priority area, Resource Materials Sharing, has been retained from 1979.

Community Service Program Area:

1. **Community Decision Making:** This area will address the need for greater citizen involvement in decision making on the array of public policy issues which have an impact on the quality of our lives and the goods and services we receive.

2. **Retrenchment Strategies:** Projects will develop and propose ways that individuals, communities, institutions, agencies and governmental units can rearrange, reduce and/or restructure in anticipation of increasing costs and decreasing resources.

Continuing Education Program Area:

1. **Continuing Education for Implementation of the Rights of the Handicapped:** Two problems will be addressed: Providing educational opportunities to the handicapped, and providing relevant orientation and training to individuals who must work with the handicapped as a result of new legislation.
2. **Family and Personal Relations:** Provide information, training and/or assistance to individuals and groups to improve interpersonal, parenting, marital and other relationships.
3. **Continuing Education for Private, Nonprofit Agency Personnel:** Provide for overall management skills training for employees of private, not for profit social service agencies.
4. **Models for Health Maintenance, Consumption and Delivery:** To develop knowledgeable health care consumers in Indiana -- persons who are aware of what health care alternatives are unavailable and how their life styles and patterns affect health.

Proposals guidelines will be published upon receipt.

**Department of Agriculture
Competitive Research Grants**

No. FY80-66

The Science and Education Administration will award research grants for periods not to exceed five years, on a competitive basis, to support basic research underlying the mission of the USDA. Basic research grants will be considered in selected areas of plant biology and human nutrition, which have been considered in selected areas of plant biology and human nutrition, which have been considered by a number of scientific groups to possess exceptional opportunity for fundamental scientific discovery and for contributing, in the long run, to applied research and development vitally needed on important food and nutrition problems. This grants program results from the recognition that new innovative approaches and enhanced levels of funding are needed as we seek ways to increase food production and improve human nutrition.

Consideration will be given to research proposals which address fundamental questions in these areas and which are consistent with the long-range missions of USDA. While a basic guideline for each of the programs is provided to assist members of the scientific community in assessing their interest in the program areas and to delineate certain important areas where new information is vitally needed, the guidelines are not meant to provide boundaries or to detract from the creativity of potential investigators. Accordingly, it is hoped that innovative projects in the so-called "high-risk" category as well as those which may have a higher pay-off potential will be submitted.

The high priority basic research programs and their tentative dates for proposal receipt are:

Biological Stress on Plants - Jan. 11, 1980.
Human Nutrient Requirements and Photosynthesis - Feb. 1, 1980.

National Science Foundation Program for the Analysis of Science Resources

No. FY80-67

The Division of Science Resources Studies (SRS) of the National Science Foundation (NSF) is responsible for the development and analysis of data pertaining to the Nation's scientific and technological endeavors, from which a number of analytical reports are prepared and published including the National Science Board's biennial report, Science Indicators. SRS welcomes proposals for studies under its Program for the Analysis of Science Resources. These studies are expected to focus on:

- Training and employment of scientific and technical personnel;
- Funding of scientific and technical activities;
- Scientific and technical employment forecasting activities; and
- Quantitative studies of the impacts and outputs of scientific and technological activities.

This program seeks:

- Development of in-depth and issue-oriented analyses of scientific and technical personnel and/or science and technology funding and performance using SRS and related data;
- Development of new or improved techniques for analyzing science resources data and their relationships with other variables;
- Development of forecasts and forecasting techniques for (1) demand and supply of scientific and technical personnel, and (2) R&D expenditures;
- Development of new indicators measuring impacts and outputs of scientific and technological activity, particularly, though not exclusively, indicators of technological innovation; and
- Development of modeling techniques that describe key interactions among important components of the economic system as they relate to science and technology.

SRS maintains data bases on: (1) the characteristics, utilization and supply of scientific and technical personnel, and (2) the funding of scientific and technological activities with emphasis on research and development in four economic sectors--government, industry, higher education and other nonprofit institutions. These data exist in published form and/or data tapes. The data to be used, however, need not be limited to that produced by NSF or other federal agencies.

SRS, particularly the Science Indicators activity, is also concerned with measuring the outputs or results of science and technology. In order to link resources to their outputs, this area of analysis may require the use of data not currently available at SRS. Data on patents, maintained by the U.S. Patent Office, extend over 12 years by date of issue and/or application, product groups, nation of inventor, class of ownership and individual firms. The scientific literature data and indices include article counts and citation measures for 1973-77 by year, field, country and author's organization. These literature data are maintained by Computer Horizons, Inc.

The impact of scientific and technological activities can further be seen in NSF's biennial public attitude surveys which began in 1972. These data reflect the

U.S. public's attitudes toward the results and capabilities of science and technology, as well as preferences for degree of control and spending priorities, and are available from the National Technical Information Service for 1972, 1974 and 1976.

Proposals will be considered which use SRS and/or other data bases and relate to SRS areas of interest.

National Endowment for the Arts Visual Arts Program

No. FY80-68

The Visual Arts Program of the National Endowment for the Arts assists artists, craftsmen, photographers and critics of exceptional talent.

The program awards fellowships to individuals working in a wide range of artistic styles and media. It also makes grants to nonprofit tax-exempt organizations that assist visual artists.

"Visual artist" is defined as an artist, craftsman or photographer. The word "artist" refers specifically to painters, sculptors, printmakers, artists specializing in drawing, video artists, conceptual artists, environmental artists and performing artists. Generally, visual artists must be working professionals in order to receive Endowment funds.

Grants help support:

- * Artists spaces (formerly workshops/alternative spaces)
- * Art in public places
- * Individual planning and planning for public art
- * Artists, critics, photographers and craftsmen in residence
- * Photography exhibitions and accompanying catalogues
- * Photography publications
- * Photography surveys
- * Crafts workshops and master classes
- * Crafts exhibitions and accompanying catalogues
- * Crafts projects for individuals
- * Individual planning and research in the building arts
- * Services to the field

Smithsonian Institution Fellowships and Grants in History, Art and Science

No. FY80-69

Because of the length of the guidelines and the number of fellowships and grant opportunities available, what follows is a brief summary of the programs. For more information and proposal guidelines, contact the Office of Advanced Studies, Division of Research and Sponsored Programs.

The Smithsonian Visiting Research Program:

Predoctoral and Postdoctoral Fellows: Visiting investigators who seek research training supplementary to their university instruction may receive appointment as Predoctoral or Postdoctoral Fellows. Applications must be submitted by Jan. 15 of each year. Applicants must propose to conduct research in some field in which the Smithsonian has research strength. Fellows are expected to spend their tenure in residence at the Smithsonian, except for short periods of field work or research. The objective of the fellowships is to further the re-

search training of scholars and scientists in the early stages of their careers.

Visiting Graduate Student Program:

Students actively engaged in graduate study at any level may apply to study and conduct research for 10 week periods under the guidance of Smithsonian staff members. Deadline: Jan. 15.

Walter Rathbone Bacon Scholarship:

The purpose of the Walter Rathbone Bacon Scholarship is to support the study of fauna of countries other than the United States. Applicants may be doctoral candidates pursuing dissertation research or postdoctoral investigators. Deadline: Jan. 15.

Daniel and Florence Guggenheim Fellowship:

A residential appointment for graduate research at the National Air and Space Museum. One fellowship may be awarded annually for research related to technology transfer, planetary exploration or the history of aviation. Deadline: Jan. 15.

Eppley Smithsonian Fellowship:

A postdoctoral fellowship to support independent research in residence at the Smithsonian Radiation Biology Laboratory in Rockville, Maryland.

Postdoctoral Fellowships at the Smithsonian Astrophysical Observatory:

Awards will be made in various fields of astrophysics and astronomy. Deadline: Feb. 1.

Fellowships in Materials Analysis:

A fellowship is available for research on problems in the application of techniques of the physical sciences to problems in art history, anthropology, archaeology and the history of technology. Deadline: Jan. 15.

Short-Term Visits:

Financial support in small amounts is available to scholars and students seeking access to Smithsonian facilities and staff for a short period of time, a week or more.

The Woodrow Wilson International Center for Scholars:

The Wilson Center offers a residential fellowship program of advanced research, organized in the following academic divisions: Division of Historical and Cultural Studies, Division of Social and Political Studies, Kennan Institute for Advanced Russian Studies, Latin American Program, International Security Studies Program and Environmental Studies Program. A new program is being established in the study of East Asia.

Fellowships in Museum Exhibit Operations:

Beginning in the summer of 1981, the National Air and Space Museum will offer fellowships for individuals working in positions related to museum exhibit design.

Sidney and Celia Siegel Fellowship:

Summer fellowships are offered at the Cooper-Hewitt Museum for undergraduate students who have completed at least two years of college and are interested in a career related to museum work, design or the decorative arts. Deadline: April 1.

Academic Internships:

Academic internships are offered in all areas of the institution and may vary in length from a few weeks to a year or more.

Summer Internship at the National Collection of Fine Arts:

Internships are offered to students interested in concentrating on one aspect of museum work. Applicants should have strong educational background in either art history or studio art. Deadline: Early February.

Summer Internship at the Hirshhorn Museum and Sculpture Garden:

Offered to undergraduate students who have completed their junior or senior year by June and have at least 12 semester hours of art history.

Academic Internships at the Museum of African Art:

Offered at the Museum of African Art to persons interested in museum work and the research opportunities available.

Internships in Museum Practices:

Offers the opportunity to learn the various aspects of museum operations and practices.

Fields of Research and Study:

- * American history, folk culture, music and musical instruments.
- * History of science and technology.
- * History of art, design and the decorative arts.
- * Anthropology and ethnic studies.
- * Evolutionary, systematic, behavioral and radiation biology.
- * Research in geological sciences and astrophysics.
- * Research in conservation and studies in museum education.

**National Institutes of Health
Senior Biomedical/Behavioral
Research Fellowships**

No. FY80-70

Applications for upcoming cycles of National Research Service Awards for Senior Fellows must be submitted to National Institutes of Health by Feb. 1, June 1 or Oct. 1, 1980. This program provides research training experiences in biomedical and behavior research that help scientists make major changes in the direction of their careers, broaden their scientific background, acquire new research capabilities or enlarge their command of an allied research field.

Applicants must have at least seven years (after receiving their doctorate) of relevant research or professional experience. Proposed study must include research with supervision or other guidance appropriate to the applicant's background and objectives, and a sponsor must be arranged prior to the submittal of an application. Most fellowships are for one year, although an additional year is possible in some cases. Stipends will not exceed \$30,000.

**National Institute of Education
Organizational Processes in Education**

No. FY80-71

The National Institute of Education has announced a Dec. 17, 1979 deadline for its Organizational Processes in Education Program. The program supports basic research on organizational processes in elementary and secondary schools. Small grants, up to a maximum of \$10,000 for one year and general grants, up to 3 years with no set cost limit.



Office of Education Arts Education Program

No. FY80-72


The Arts Education Program awards grants for two basic purposes: (1) To provide opportunities for all students in the schools served by the project to acquire skills and understanding in and through several arts media, including, at least, dance, music, theater and the visual arts; and (2) To integrate these arts disciplines into the regular educational program of the schools served, rather than to include them on an extracurricular or peripheral basis.

These goals are achieved by funding the following kinds of activities: (1) Leadership training and staff development; (2) Community awareness programs; (3) Technical assistance; (4) Material and curriculum development. (The Activities listed above are related to program content). Projects may also include activities related to program management, including: (1) Planning and coordination; (2) Evaluation; and (3) Documentation and dissemination.

The deadline for submitting proposals is Dec. 14, 1979.

Office of Education Foreign Language and Area Studies

No. FY80-73



Applications for new and continuation projects under the Foreign Language and Area Studies Research Program must be submitted to U.S. Office of Education by Jan. 4, 1980. This program seeks to help researchers conduct studies and surveys to determine the need for increased or improved instruction in modern foreign languages and related fields; to conduct research on training methods for use in such fields; and to develop specialized materials for use in training students and language teachers. USOE expects approximately \$970,000 to be available for an estimated 27 new and five continuation projects in fiscal year 1980.


The Ford Foundation International Security-Arms Control and Soviet-East European Area Studies Fellowship Program

No. FY80-74

Program:

To improve the skill of scholars and analysts interested in specializing both in Soviet and East European studies and in international security and arms control. The program is open to both graduate degree and postdoctoral candidates currently specializing in one of these fields. The program is international.

Graduate Degree Candidates:



Graduate degree candidates must normally be enrolled in a program of graduate study. Students now specializing in the above will be eligible for support to pursue additional graduate work in the field other than their present specialization. The award normally would cover fees and provide a modest maintenance allowance. Most awards will be for a period of one year.

Postdoctoral Candidates:

A Ph.D. or equivalent degree or substantial professional experience is required. Students now specializing in the above who wish to develop an expertise in Soviet studies or East European studies will be eligible for support to obtain skills in the field other than their present specialization. Most awards will be for a period of one year.

Deadline:

Jan. 1, 1979.

Application forms are available from:

Fellowship Program in Dual Expertise
Office of European and International Affairs
The Ford Foundation
320 East 43rd Street
New York, NY 10017

National Endowment for the Arts Composers

No. FY80-75

The Music Program of the National Endowment for the Arts assists individuals and music performing, presenting and service organizations.

The Composers Program is specifically for composers, librettists, choreographers, filmmakers, other individuals who work with composers and organizations which assist composers.

The application deadline is postmarked no later than Jan. 21, 1980.

National Science Foundation Information Dissemination for Science Education

No. FY80-76

The National Science Foundation, through the Division of Science Education Resources Improvement, supports programs and activities aimed at strengthening the capabilities of elementary and secondary schools, as well as colleges and universities, for the improvement of science and mathematics education.

The primary purpose of the Information Dissemination for Science Education Program is to encourage improvements in elementary and secondary school science, mathematics and social science by providing opportunities for school-system representatives and others concerned with education at the precollege level to learn about new and alternative instructional materials, classroom practices and recent science education research findings. The dissemination program activities are aimed at assisting state and local authorities to acquire information about materials and practices necessary to meet locally-determined needs in science education through such mechanisms as conferences, professional meetings and computerized exchanges. The target audiences for these activities are education decision-makers such as principals, supervisors, teacher-leaders, school board members and representatives of parent groups.

The Information Dissemination program is concerned with

bridging the gap which exists between educational product developers and users and is directed toward science education at the elementary and secondary school levels. The last decade has witnessed a proliferation in the development of new materials, practices and technologies available for use in elementary and secondary schools. The rapid pace at which these materials have been produced has made it difficult for those concerned with science education to examine and evaluate alternatives. The Information Dissemination program provides opportunities for education decisionmakers such as administrators, subject matter specialists, teacher-leaders, school board members and other policymakers to make more informed choices. The scope of information dissemination activities may include curriculum and instructional materials, research findings, concepts, processes and educational technologies pertinent to instruction in the sciences including social science and mathematics at the precollege level. Activities will develop an awareness and demonstrate alternatives; they will also provide for discussion of design features, intended users, expected costs, advantages and disadvantages and other relevant information.

Projects are expected to be local or regional, rather than having a national orientation. In addition to making projects pertinent to local needs, a narrow geographic focus is more efficient and will encourage continuing communication between participants and the project staff.

It is not the intent of this program to improve the content background of teachers or to provide on-site technical assistance to teachers in the implementation or the utilization of specific curricular materials, practices or technologies.

The closing date for submission of proposals is Jan. 9, 1980.

Department of Energy Solar Energy Research

No. FY80-77

The Department of Energy (DOE) desires to receive proposals from colleges and universities for advanced research related to solar energy. The broad objectives of this program are:

- * To add to the store of fundamental knowledge for advancing the use of solar energy;
- * To stimulate new approaches to the conversion and utilization of solar-derived energy;
- * To support feasibility or "proof of concept" studies of these new approaches; and
- * To stimulate the growth of a solar-related intellectual base in the nation's academic community.

Proposals will be considered for basic and applied research projects in the biological, engineering and physical sciences related to solar energy conversion. Proposals involving development studies, extensive component testing programs, demonstration of systems, economic studies, marketing studies, instructional materials or the establishment of solar energy centers/institutes are inappropriate for this particular program and should not be submitted.

Proposals should be submitted no later than Jan. 10, 1980.

National Endowment for the Humanities Antarctic Fellowship

No. FY80-78

The National Endowment for the Humanities is cooperating with the National Science Foundation's U.S. Antarctic Research Program in selecting a scholar in the humanities to spend one to six months in Antarctica from Oct. 1980 to March 1981.

The Antarctic Fellowship will be awarded for a continuous period of either three, six or 12 months of full-time study and research, with maximum stipends of \$5,000 for three months, \$10,000 for six and \$20,000 for 12. The stipend will be based on the fellow's current academic-year salary, minus sabbatical and other grants. The fellow will be expected to spend a substantial period in the Antarctic. Travel, polar clothing and subsistence in Antarctica will be provided by the National Science Foundation.

The Antarctic Fellowship is intended for scholars whose work seems likely to lead to significant contributions to humanistic thought and knowledge. The scope of endowment support includes all the fields of the humanities and those areas of the social sciences that employ historical or philosophical approaches, such as jurisprudence, international relations, political theory, sociology and other subjects concerned primarily with questions of value rather than quantitative matters. Candidates for degrees and persons seeking support for work leading toward degrees are not eligible, although applicants need not have advanced degrees to qualify. Applicants must be doing or planning to do research relating in whole or in part to Antarctica.

Applications should be submitted no later than Jan. 2, 1980.

National Institute of Mental Health Mental Health Service System Research

No. FY80-79

The Division of Biometry and Epidemiology of the National Institute of Mental Health is initiating a research grant program in Mental Health Service System Research. This program has been designed to enhance our understanding of the resources, structure and functions of the U.S. mental health service system, its utilization patterns, its costs and financing, its interactions with the general health care system and its capacity to respond to the mental health service needs of the nation. The program is expected, as well, to provide information for developing and implementing policy affecting mental health services at local, state and national levels.

The emphasis of the program is on quantitatively oriented studies which can produce generalizable knowledge about the mental health service system and advance the state of applied research methodology in this area. The program is limited to studies of the mental health service system. This system includes services to persons with mental disorders in general medical and other human services settings, as well as in specialty mental health service settings. Support will not be provided

for the routine application of established methodologies in operating programs, or for individual community needs assessments or evaluations of single operating programs unless such studies are designed to have broader applications to the field.

Five research areas will be emphasized initially:

1. Assessment of costs and financing of mental health services.
2. Assessment of the supply and utilization of mental health facilities and services.
3. Interactions within the general health/mental health service system which influence the care of persons with mental disorders.
4. Assessment of the need for mental health services
5. Applications of information systems technology to mental health service systems.

These five research areas are not mutually exclusive; a given research study may cut across several areas.

Research proposals in all five areas are encouraged. However, in the initial years of the program, special priority will be given to studies in the cost and financing area. While mental health service system research outside of the five priority areas will be considered, such studies will not receive a high priority for funding.

The next deadline for receipt of applications is March 1, 1980.

National Science Foundation Postdoctoral Research Fellowships in the Mathematical Sciences

No. FY80-80

In fiscal year 1979, NSF initiated a small experimental program of postdoctoral fellowships for research in the mathematical sciences. Fifteen such fellowships were awarded in March 1979.

This program will be continued during the 1980 fiscal year, probably at an expanded level. Deadline for the submission of applications is scheduled for Jan. 1, 1980, with awards being announced around Mar. 1, 1980. Applications will be accepted in core mathematics, applied mathematics and statistics.

National Science Foundation Special Research Initiation Awards for New Investigators in Information Science

No. FY80-81

NSF's Division of Information Science and Technology will continue granting Special Research Initiation Awards for new investigators in Information Science in fiscal year 1980. Proposals should be received by NSF no later than Feb. 6, 1980.

These special awards, intended to stimulate new research in the field of information science, were established last year as part of the division's program of research support. They are offered only to principal investigators holding a doctoral degree in information science or a related field for no more than 5 years. Investigators receiving these awards are not eligible for subsequent Special Research Initiation competitions.

current publications and other scholarly works

ARTS AND LETTERS
HUMANISTIC AND SOCIAL STUDIES

American Studies

Christman, Elizabeth

E. Christman. 1979. A good word for solitude. *Notre Dame Magazine* 8(3):31-32.

E. Christman. 1979. *Flesh and Spirit*. William Morrow & Company, New York. 188 pp.

Art

Lauck, CSC, Anthony J.

A.J. Lauck, CSC. 1979. Exhibition of sculpture, watercolor and drawings. The Gallery of the Two Ferns, South Bend, Indiana.

Porter, Dean A.

D.A. Porter. 1979. Watercolors and reception. Jefferson Gallery, South Bend, Indiana.

Vogl, Donald G.

D.G. Vogl. 1979. A Sense of Place, paintings. Notre Dame Art Gallery, University of Notre Dame, Notre Dame, Indiana.

D.G. Vogl. 1979. Pompeii, acrylic painting. American Painting, Butler Institute of American Art, Youngstown, Ohio.

English

Golden, Sean V.

S.V. Golden and P. Fallon. 1979. Fine horses and fine leaping. *Cara* 12(5):40-47.

Philosophy

Chroust, Anton-Hermann

A.H. Chroust. 1979. Did the ancient Greeks ever see America or set foot on American soil? *Innsbrucker Beiträge Zur Kultur Wissenschaft* 20 (Serta Philologica Aenipontana III):9-15.

Psychology

Borkowski, John G.

J.G. Borkowski. 1979. Review of P. Ornstein's *Memory Development in Children*. *American Scientist* 67:486.

J. Kestner and J.G. Borkowski. 1979. Children's maintenance and generalization of an interrogative learning strategy. *Child Development* 50:485-494.

J.C. Cavanaugh and J.G. Borkowski. 1979. The meta-memory-memory connection: The effects of strategy transfer and maintenance. *Journal of General Psychology* 101:161-174.

J.G. Borkowski and J.C. Cavanaugh. 1979. Maintenance and generalization of skills and strategies by the retarded. Pages 569-617 in, N.R. Ellis, ed. *Handbook of Mental Deficiency*. Erlbaum and Associates, Hillsdale, New Jersey.

J.M. Belmont, E.C. Butterfield and J.G. Borkowski. 1979. Training retarded people to generalize memorization methods across memory tasks. Pages 418-425 in, M.M. Gruneberg, P.E. Morris and R.N. Sykes, eds. *Practical Aspects of Memory*. Academic Press, London.

Sociology and Anthropology

Weigert, Andrew J.

- R. McLain and A.J. Weigert. 1979. Toward a phenomenological sociology of family: A programmatic essay. Pages 160-205 in, W.R. Burr, R. Hill, F.I. Nye and I. Reiss, eds. Contemporary Theories About the Family. Free Press, New York.

SCIENCE

Chemistry

Trozzolo, Anthony M.

- V. Bhat, V.M. Dixit, B.G. Ugarkar, A.M. Trozzolo and M.V. George. 1979. Photooxygenations of sydnone and azomethine imines. Journal of Organic Chemistry 44(17):2957-2961.

Physics

Johnson, Walter R.

- W.R. Johnson and K.T. Cheng. 1979. Quantum defects for highly stripped ions. Journal of Physics B: Atomic and Molecular Physics 12(6):863-879.
C.D. Lin and W.R. Johnson. 1979. Two-channel relativistic random-phase approximation applied to the photoionisation of helium- and beryllium-like ions. Journal of Physics B: Atomic and Molecular Physics 12(10):1677-1685.

ENGINEERING

Aerospace and Mechanical Engineering

Mueller, Thomas J.

- F.N. Underwood and T.J. Mueller. 1979. Numerical study of the steady axisymmetric flow through a disk-type prosthetic heart valve in an aortic-shaped chamber. Journal of Biomechanical Engineering 101:198-204.
J.T. Kegelman, R.C. Nelson and T.J. Mueller. 1979. Smoke visualization of the boundary layer on an axisymmetric body. Pages 467-473 in, American Institute of Aeronautics and Astronautics/Atmospheric Flight Mechanics Conference for Future Space Systems, Boulder, Colorado.

Nelson, Robert C.

- J.T. Kegelman, R.C. Nelson and T.J. Mueller. 1979. Smoke visualization of the boundary layer on an axisymmetric body. Pages 467-473 in, American Institute of Aeronautics and Astronautics/Atmospheric Flight Mechanics Conference for Future Space Systems, Boulder, Colorado.

LAW

Ripple, Kenneth F.

- K.F. Ripple. 1979. Review of The Military in American Society. Naval War College Review 32:116.
K.F. Ripple. 1979. The gospel according to the court. America :461.
K.F. Ripple and D. Kommers. 1979. Aussergesetzliche massstaebe in der rechtsprechung des supreme court der Vereinigten Staaten. (Extralegal standards in the process of constitutional adjudication in the supreme court of the United States.) Zeitschrift fur Politik 26:125.
K.F. Ripple and D. Kenyon. 1979. State sovereignty-a polished but slippery crown. Notre Dame Lawyer 54:745.
Smithburn, J. Eric
J.E. Smithburn. 1979. Perceived perjury at trial: A proper consideration for the sentencing judge. Court Review Digest 17(3).

RADIATION LABORATORY

Almgren, Mats

- M. Almgren, F. Grieser and J.K. Thomas. 1979. Rate of exchange of surfactant monomer radicals and long chain alcohols between micelles and aqueous solutions. Journal of the Chemical Society 75:1674-1687.
Huo, Winifred M.
W.M. Huo. 1979. Limiting slope of the generalized oscillator strength vs momentum transfer curve. The Journal of Chemical Physics 71(4):1593-1600.
Srisankar, Elappulli V.
S.N. Bhattacharyya and E.V. Srisankar. 1979. Radiation chemistry of cobalt (II) nitrilotriacetate in aqueous solution. Journal of the Chemical Society, Faraday Transactions I 75:2089-2099.

monthly summary

Awards Received

IN THE MONTH OF SEPTEMBER, 1979

Department or Office	Principal	Short title	Sponsor	Dollars Months
AWARDS FOR RESEARCH				
Law School	Sandoval	National Chicano Council on Higher Education Post-Doctoral Fellowship	NCCHE	7,500 5
Center Study Man	Aldous, Jache	Elderly widows and their adult children	Admin. Aging	5,500 12
Civil Eng.	Theis	Incinerated municipal sludge ashes and leachates	Environ. Prot. Agency	41,146 20
College Eng.	Hogan	Whirlpool Corporation fellowship in engineering	Whirlpool Corp.	8,750 12

Center Study Man	Newfarmer, Marsh	Influence of U.S. and other multi- nations on development in Brazil	Dept. Labor	83,000 16
Center Study Man	Aldous, Klein	Family size and later kin contacts: A pilot study	Natl. Inst. Health	56,165 11
Center Study Man	Davisson, Beverly, Bonello	Effect of inflation upon business firms supplying Air Force	U.S. Air Force	42,971 8
Radiation Laboratory	Schuler	Effects of radiation on matter	Dept. Energy	150,000 12

AWARDS FOR EDUCATIONAL PROGRAMS

Center Study Man	Santos	Outreach training to assist rural and minority elderly	Natl. Inst. Mental Health	99,188 10
Civil Eng.	Irvine	Environmental health engineering training program	Environ.	9,492 12
Psychology	Borkowski, Whitman	Research training in mental retardation	Natl. Inst. Health	56,184 12
College Bus. Admin.	Ryan	Howard V. Phalin graduate fellowship	The Howard V. Phalin Fdtn.	1,500 9
Snite Mus. Art	Porter	General operating support for the Snite Museum of Art	Inst. Museum Serv.	25,000 12

AWARDS FOR SERVICE PROGRAMS

Cent. Human Develop.	Dwyer	Needs assessment program - ministry to priests program	---	26,548 --
Cent. Human Develop.	Dwyer	Needs assessment program - ministry to priests program	U.S. Army	51,100 --
Cent. Past. Soc. Min.	Melloh	Notre Dame Center for Pastoral Liturgy	---	1,268 --
Cent. Past. Soc. Min.	Pelton	Notre Dame Institute for Clergy Education	---	4,507 --

Proposals Submitted

IN THE MONTH OF SEPTEMBER, 1979

Department or Office	Principal	Short title	Sponsor	Dollars Months
PROPOSALS FOR RESEARCH				
Microbiology - Lobund Lab.	Wostmann	Effects of intestinal microorganisms on cholesterol metabolism	Eagles' Max Baer Heart Fund	-- --
English	McDonald	Illustrations for American Renaissance Neoclassicism	Amer. Phil. Soc.	3,060 1
Art	Beckman	Design research	Ind. Arts Comm.	28,299 6
Electrical Eng.	Ajmera	Deposition of thin-film polycrystal- line layers of semiconductors	Solar Energy Res. Inst.	51,332 12
Art	Beckman	Design directions - research and forecast	(private organizations)	28,299 5
Aerospace Mech. Eng.	Cullinane	Material flow characteristics in aerospace production	Research Triangle Inst.	30,000 10
Microbiology - Lobund Lab.	Wostmann	Characterization of nutritionally defined gnotobiot	Natl. Inst. Health	98,474 12
Chemistry	Miller	Synthesis of ferrichrome and related iron chelators	Natl. Inst. Health	49,465 12
Chemistry	Basu	Metabolism of glycosphingolipids in animal cells	Natl. Inst. Health	99,460 12
Accountancy, Management	Nichols, Vecchio	Auditor's affective and behavioral reactions to working conditions	Peat, Marwick, Mitchell & Co.	17,515 11
PROPOSALS FOR EQUIPMENT				
Physics	Kenney, Biswas, Cason, Shephard	Computing equipment for ND HEP program	Natl. Sci. Fdn.	138,600 12
PROPOSALS FOR EDUCATIONAL PROGRAMS				
Civil Eng.	Ketchum	Urban engineering training	Jessie Smith Noys Fdtn., Inc.	487,107 56

Chemistry	Schwartz	Undergraduate research participation - Chemistry	Natl. Sci. Fdn.	18,884
Civil Eng.	Ketchum	Urban engineering training	(private fdtn.)	197,765
Civil Eng.	Ketchum, Irvine	Undergraduate research participation - Civil Engineering	Natl. Sci. Fdn.	11,989
Biology	Bender	Undergraduate research participation - Biology	Natl. Sci. Fdn.	19,890
Snite Mus. Art	Porter	Portrait of a collector, connoisseur, and cellist: Janos Scholz	Ind. Arts Comm.	43,951
Snite Mus. Art	Porter	Conservation 1980-81: Phase II	Ind. Arts Comm.	17,121
Mathematics	Borelli	Pre-college teacher development for secondary mathematics teachers	Natl. Sci. Fdn.	20,930
Mathematics	Borelli	Pre-college teacher development for secondary mathematics teachers	Natl. Sci. Fdn.	39,025
Electrical Eng.	Ajmera, Cohn	Improving undergraduate semiconductor courses using microcomputers	Natl. Sci. Fdn.	36,672
Biology	Greene	Michiana ecosystems as a natural laboratory	Natl. Sci. Fdn.	27,339
English	Matthias, McDonald	International small press and literary works project	Natl. Endow. Arts	48,268

summary of awards received and proposals submitted

IN THE MONTH OF SEPTEMBER, 1979

AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	3	\$ 241,750	5	\$ 153,282	8	\$ 395,032
Facilities and Equipment	-	- - -	-	- - -	-	- - -
Educational Programs	2	65,676	3	125,688	5	191,364
Service Programs	-	- - -	5	83,423	5	83,423
Total	5	\$ 307,426	13	\$ 362,393	18	\$ 669,819

PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	3	\$ 247,399	7	\$ 158,505	10	\$ 405,904
Facilities and Equipment	-	- - -	1	138,600	1	138,600
Educational Programs	2	47,229	10	921,712	12	968,941
Service Programs	-	- - -	-	- - -	-	- - -
Total	5	\$ 294,628	18	\$ 1,218,817	23	\$ 1,513,445

closing dates for selected sponsored programs

Proposals must be submitted to the Office of Research and Sponsored Programs seven (7) calendar days prior to the deadline dates listed below.

Agency	Programs	Application Closing Dates
Civil Service Commission	Presidential Management Interns	December 21, 1979
National Institute of Education	Educational Research and Development Proposals	December 31, 1979
National Institute of Education	Research in Education (unsolicited)	December 31, 1979
National Science Foundation	History and Philosophy of Science	December 31, 1979
National Science Foundation	Law and Social Sciences	December 31, 1979
National Science Foundation	Measurement Methods and Data Resources	December 31, 1979
National Science Foundation	Sociology	December 31, 1979
Office of Education	Consumers' Education Program	December 19, 1979
United States Merchant Marine Academy	Admissions	December 31, 1979

documen- tation

faculty handbook clarification

To Deans, Associate and Assistant Deans, Department Chairmen

Dear Colleagues:

The Faculty Handbook over recent years has contained two incompatible statements of policy regarding Academic Honesty. Through editorial oversight, version one in the Academic Code (Faculty Handbook, p. 38, 17.2) approved by the Academic Council on May 13, 1974, was not deleted when version two (Faculty Information, Faculty Handbook, pp. 64-65) was approved by the Academic Council on Feb. 11, 1975 (74-75 Notre Dame Report 14, 299-304).

The full statement of the later and currently effective version of the University's policy on Academic Honesty can be found on pages 64-65 of the Faculty Handbook, 1979-80. Please note:

1. that every department is to have a standing Honesty Committee which must include student representation;
2. that a grade of "F" is not to be assigned immediately for the instance or for the course, but that the professor reserves judgement until after receiving the recommendation of the Honesty Committee;
3. that the student has the right to appeal the decision to the academic dean;
4. that if the decision is against the student, a full report is sent to the academic dean for inclusion in the student's file.

Because there have been difficulties in the past over which of the two versions to follow, I would ask you to notify your departmental faculty members that only the later version (Faculty Handbook, pp. 64-65) is in effect. The appropriate revisions will be made in the 1980-81 edition of the Faculty Handbook.

Thank you for your help in this regard.

Sincerely,

M. Katherine Tillman
Assistant Provost

university academic calendar for 1980-81

Fall Semester 1980

Aug. 23-25	Sat thru Mon	Orientation and counseling for new students
Aug. 25	Monday	Registration for all students
Aug. 26	Tuesday	Classes begin 8 a.m.
Sept. 3	Wednesday	Latest date for all class changes
Sept. 14	Sunday	Formal opening of the school year with concelebrated Mass (Subject to change)

Oct. 16	Thursday	Midsemester reports of deficient students are due in Registrar's Office
Oct. 18-26	Sat thru Sun	Midsemester vacation
Oct. 27	Monday	Classes resume at 8 a.m.
Oct. 31	Friday	Last day for course discontinuance at Notre Dame
Nov. 13-20	Th thru Th	Advance registration for spring semester 1981
Nov. 27-30	Th thru Sun	Thanksgiving holiday begins at 12:30 p.m. on Wednesday, Nov. 26
Dec. 1	Monday	Classes resume at 8 a.m.
Dec. 11	Thursday	Last class day
Dec. 12	Friday	Study day (no examinations)
Dec. 13-19	Sat thru Fri (noon)	Final examinations (no exams Sunday morning)

CLASS MEETINGS

MWF	42	TT	29
MW	29	TWT	44
MF	27	TTF	42
MTuW	44	TuF	28
MTT	43	TWF	43
MWTh	43		
MTh	28		
MTuF	42		
MThF	41		

NUMBER OF CLASS DAYS

	Mon	Tues	Wed	Thurs	Fri	Total
Aug.	0	1	1	1	1	4
Sept.	5	5	4	4	4	22
Oct.	3	3	4	4	4	18
Nov.	4	4	4	3	3	18
Dec.	2	2	2	2	1	9
Total	14	15	15	14	13	71

(N.B., Wednesday P.M. classes have one less meeting than shown above due to Thanksgiving holiday.)

Spring Semester 1981

Jan. 12	Monday	Orientation for new students
Jan. 13	Tuesday	Registration day
Jan. 14	Wednesday	Classes begin at 8 a.m.
Jan. 22	Thursday	Latest date for all class changes
Feb. 9-13	Mon thru Fri	Enrollment reservations for the fall semester 1981-82
Mar. 5	Thursday	Midsemester reports of deficient students are due in Registrar's Office
Mar. 14-22	Sat thru Sun	Midsemester vacation
Mar. 27	Friday	Last day for course discontinuance at Notre Dame
Apr. 17-20	Fri thru Mon	Easter holiday begins after last class on Thur., Apr. 16
Apr. 21	Tuesday	Classes resume at 8 a.m.

Apr. 23-30	Th thru Th	Advance registration for the fall semester 1981-82 and for the summer session 1981
Apr. 29,30, May 1	Wed thru Fri	Room reservations for the fall semester 1981-82
May 4	Monday	Last class day
May 5	Tuesday	Study day (no examinations)
May 6-12	Wed thru Tu (noon)	Final examinations (no exams Sunday morning)
May 15-17	Fri thru Sun	Commencement weekend

CLASS MEETINGS

MWF	43	TT	29
MW	29	TWT	44
MF	28	TTF	43
MTuW	43	TuF	28
MTT	43	TWF	43
MWTh	44		
MTh	29		
MTuF	42		
MThF	43		

NUMBER OF CLASS DAYS

	Mon	Tues	Wed	Thurs	Fri	Total
Jan.	2	2	3	3	3	13
Feb.	4	4	4	4	4	20
Mar.	4	4	3	3	3	17
Apr.	3	4	5	5	3	20
May	1	0	0	0	1	2
Total	14	14	15	15	14	72

Summer Session Calendar Dates

	<u>1980</u>	<u>1981</u>
Registration	June 23	June 22
Commencement	Aug. 8	Aug. 7

university academic calendar for 1981-82

Fall Semester 1981

Aug. 22-24	Sat thru Mon	Orientation and counseling for new students
Aug. 24	Monday	Registration for all students
Aug. 25	Tuesday	Classes begin at 8 a.m.
Sept. 2	Wednesday	Latest date for all class changes
Sept. 13	Sunday	Formal opening of the school year with concelebrated Mass. (Subject to change)
Oct. 15	Thursday	Midsemester reports of deficient students are due in Registrar's Office
Oct. 17-25	Sat thru Sun	Midsemester vacation
Oct. 26	Monday	Classes resume at 8 a.m.
Oct. 30	Friday	Last day for course discontinuance at Notre Dame

Nov. 12-19	Th thru Th	Advance registration for spring semester 1982
Nov. 26-29	Th thru Sun	Thanksgiving holiday begins at 12:30 p.m. on Wednesday, Nov. 25
Nov. 30	Monday	Classes resume at 8 a.m.
Dec. 11	Friday	Last class day
Dec. 12	Sat	Study day
Dec. 13-19	Sun thru Sat (noon)	Final examinations (no examinations Sunday morning)

CLASS MEETINGS

MWF	43	TT	29
MW	29	TWT	44
MF	28	TTF	43
MTuW	44	TuF	29
MTT	43	TWF	44
MWTh	43		
MTh	28		
MTuF	43		
MThF	42		

NUMBER OF CLASS DAYS

	Mon	Tues	Wed	Thurs	Fri	Total
Aug.	1	1	1	1	1	5
Sept.	4	5	5	4	4	22
Oct.	3	3	3	4	4	17
Nov.	5	4	4	3	3	19
Dec.	1	2	2	2	2	9
Total	14	15	15	14	14	72

(N.B., Wednesday P.M. classes have one less meeting than shown above due to Thanksgiving holiday.)

Spring Semester 1982

Jan. 11	Monday	Orientation for new students
Jan. 12	Tuesday	Registration day
Jan. 13	Wednesday	Classes begin at 8 a.m.
Jan. 21	Thursday	Latest date for all class changes
Feb. 8-12	Mon thru Fri	Enrollment reservations for the fall semester 1982-83
Mar. 4	Thursday	Midsemester reports of deficient students are due in Registrar's Office
Mar. 13-21	Sat thru Sun	Midsemester vacation
Mar. 22	Monday	Classes resume at 8 a.m.
Mar. 26	Friday	Last day for course discontinuance at Notre Dame
Apr. 9-12	Fri thru Mon	Easter holiday begins after last class on Thurs., Apr. 8
Apr. 13	Tuesday	Classes resume at 8 a.m.
Apr. 22-29	Th thru Th	Advance registration for the fall semester 1982-83 and for the summer session 1982
Apr. 28,29,30	Wed thru Fri	Room reservations for the fall semester 1982-83

May 3	Monday	Last class day
May 4	Tuesday	Study day (no examinations)
May 5-11	Wed thru Tu (noon)	Final examinations (no exams Sunday morning)
May 14-16	Fri thru Sun	Commencement weekend

CLASS MEETINGS

MWF	43	TT	29
MW	29	TWT	44
MF	28	TTF	43
MTuW	43	TuF	28
MTT	43	TWF	43
MWTh	44		
MTh	29		
MTuF	42		
MThF	43		

NUMBER OF CLASS DAYS

	Mon	Tues	Wed	Thurs	Fri	Total
Jan.	2	2	3	3	3	13
Feb.	4	4	4	4	4	20
Mar.	4	4	4	3	3	18
Apr.	3	4	4	5	4	20
May	1	0	0	0	0	1
Total	14	14	15	15	14	72

Summer Session Calendar Dates

1981

1982

Registration	June 22	June 21
Commencement	Aug. 7	Aug. 6

fitzpatrick hall dedication mass homily

(Following is the homily preached by Rev. Ferdinand L. Brown, C.S.C., associate provost of the University, at the Oct. 5, 1979, dedication Mass for Fitzpatrick Hall of Engineering.)

We gather this afternoon to join our minds and hearts in offering the Mass of the Holy Spirit as we celebrate the dedication and blessing of the Fitzpatrick Hall of Engineering. It is fitting that this religious and liturgical ceremony is central and integral to the dedication program.

It is fitting because as we recognize the selfless generosity and efforts of those who made this building a reality, we express our gratitude by asking God's blessing on them all by sharing in this Eucharistic offering of the Son of God to His Father.

It is fitting also as a reminder that ours is a Catholic University where the Catholic character of our commitment must impress all our intellectual work and permeate this community of learners.

The world, indeed the universe, is God's gift to man. According to the story of creation as told in Genesis, when God had finished His handiwork He turned it over to man with His blessing and the command, "subdue it...exercise dominion over it."

Since that time man has been trying to carry out that order. He has been driven by his efforts to survive, by his efforts to ease his burdens, by his God-given insatiable curiosity and by his unquenchable aspiration to attain a suitable state of peace, contentment and happiness in this life. By these efforts science and technology have progressed through the centuries from the forked stick and sharpened stone to the scientific and technological marvels of our time--a time that can only be characterized as the age of technology.

The age of technology! We have harnessed the powers of nature to create nuclear weapons

and now live in fear of blowing up the earth. We have developed nuclear power sources to provide sorely needed energy and today many live in fear of deformed generations to come. We successfully placed men on the moon but still live with inhuman poisonous traffic in our own cities. With pinpoint precision we have placed communication satellites thousands of miles above the earth. These satellites make instant worldwide communication a reality; yet only recently hundreds were killed in some remote Caribbean area because they could not be warned or instructed how to take safeguards against an approaching hurricane. Medical science has perfected surgical techniques that are truly life preserving--it sometimes seems, almost life-giving; but that same technology has perfected procedures for performing less traumatic and less aesthetically objectionable abortions. Though the technology exists for producing more nourishing food in greater abundance, approximately two-thirds of the world goes to bed hungry every night.

The age of technology! An age that is both wonderful and frightening. An age of successes and failures. An age of problems solved, of problems created, and problems left untouched. An age of achievements that boggle the mind; of phenomena that wound the heart.

The science and technology exist to solve these problems. But that is not enough. The problems demanding our concern involve human beings and their opportunity to lead dignified human lives. These problems involve moral and ethical dilemmas. These are problems of human beings relating to one another in a civilized way (love your neighbor) and of human beings relating to their God (love the Lord your God).

The Second Vatican Council beautifully teaches that God's command to exercise dominion over the earth was reaffirmed by the Mystery of the Redemption. In trying to carry out this command then we are called to share in Christ's Kingship. The essential meaning of this Kingship consists of the absolute priority of moral values and ethical standards in all our endeavors, in the primacy of persons over things, and in the superiority of spirit over matter.

Just as the facilities provided by the Fitzpatrick Hall of Engineering increase the potential for improving our engineering endeavors, so does the increased potential increase our responsibilities.

We must strive ever anew to give the best engineering education possible within the capabilities of this University. We must strive ever anew to educate engineers who will be masters of their field and completely competent professionally.

But we must do more. We must give this education in the context of the contemporary world and its problems. The engineer who is educated here must know his or her knowledge and power can be used for good or evil, to exploit or assist mankind, to serve noble or trivial ends. We must educate engineers who realize that the values that add dignity and meaning to their profession reside not in technology or engineering, not in their knowledge and power, but in themselves, in the motives that prompt and inspire the use of their knowledge and power. And they must realize there can be no loftier motive than to serve their God and Creator by using their knowledge and power to address the moral dilemmas of our time and to serve other men and women.

In a word--we must train engineers who in their personal and professional lives share in the Kingship of Christ.

May the Holy Spirit guide them and us.

summary of the board of trustees meeting october 19, 1979

1. The Board convened at 9:03 a.m. Four new trustees were introduced: Rev. Richard V. Warner, C.S.C., provincial superior of the Holy Cross Fathers' Indiana Province, South Bend; Anthony J.F. O'Reilly, president of the H.J. Heinz Company, Pittsburgh, Pa.; Judge George N. Leighton of the United States District Court, Chicago, Ill. and William D. Reynolds of Independent Mechanical Industries, Inc., Chicago and president of the Notre Dame Alumni Association.
2. The trustees viewed a film, "College and University Trusteeship," produced by the Association of Governing Boards.
3. The minutes of the board's meeting of May 4, 1979, were approved.

4. The report of the Academic and Faculty Affairs Committee, summarizing its meeting of the previous day, was presented by its chairman, Dr. Thomas P. Carney. He said the committee discussed the University's library collection and its need for much more funds than presently budgeted. The group also reviewed the Faculty Senate's Survey of Faculty Attitudes, copies of which will be sent to all trustees.
5. The provost of the University, Professor O'Meara, identified the University's priorities in the academic sector. They are the Catholic character of the University and the faculty, the excellence of faculty in teaching and research, the filling of 14 endowed chairs, the admissions of 500 more women undergraduates, faculty salaries, faculty development, the improvement of the library collection, increasing the number and size of graduate student stipends and even better undergraduate education.
6. Professor O'Meara described the work of the Science Dean Search Committee.
7. Dr. Francis J. Castellino, the new dean of the College of Science, gave an overview of its educational programs and research.
8. The president of the University, Father Hesburgh, presented a report on the United Nations Conference on Science and Technology for Development to which he was the United States Ambassador.
9. Father Warner gave an overview of the Holy Cross Fathers' Indiana Province and its apostolates. The province numbers more than 500 religious operating three colleges and universities, four high schools, 40 parishes and publications. Its members serve also as chaplains and as missionaries in Chile, Peru, Bangladesh, Kenya and Uganda.
10. Katherine Tillman, assistant provost, described "Ideas, Values, Images," the new core course for sophomores in the College of Arts and Letters.
11. Sr. John Miriam Jones, assistant provost, reviewed the progress of the University's affirmative action program during the past year. She said there are 28 new women faculty members this year making a total of 99. Progress has not been as favorable in recruiting minority faculty members.
12. The board of trustees recessed for luncheon at the Fitzpatrick Hall of Engineering and toured the new facility.
13. Reconvening, the trustees heard the report of the Investment Committee which was presented in the absence of Chairman Robert K. Wilmouth by John R. Ryan, Jr. The committee received economic forecasts from its four advisor firms and voted to maintain a 75 per cent to 25 per cent ratio between stocks and bonds in the University's endowment.
14. The executive vice president of the University, Father Joyce, presented an analysis of components of Notre Dame's endowment.
15. John T. Goldrick, director of admissions, made a presentation on "Admissions: The Notre Dame Freshman, 1969-1979." He said that while SAT scores have declined nationally, they are up at Notre Dame.
16. The report of the Financial Affairs Committee was presented by Father Joyce and Thomas J. Mason, vice president for business affairs. They reviewed highlights of the University's financial statements for the year ending June 30, 1979. A \$452,000 deficit is projected for the current fiscal year.
17. The allocation of Campaign for Notre Dame resources was discussed by Father Joyce. Of campaign commitments totaling \$152,567,907, payments amounting to \$48,112,298 have been received.
18. A report on the Campaign for Notre Dame was presented by its national cochairmen, John T. Ryan, Jr. and Mrs. Ernestine M. Raclin.
19. Father Hesburgh presented a report describing the facilities and programs of the Ecumenical Institute for Advanced Theological Studies in Jerusalem and explained its relationship to the University and its need for additional financial resources.
20. Chairman John A. Schneider presented the report of the Student Affairs Committee. He described student spirit as "positive."

21. The report of the Public Relations and Development Committee was presented by its chairman, Paul Foley. He said the group had assumed the responsibilities of the National Campaign Committee which had held its final meeting the previous day and disbanded. But he cautioned that the campaign is not over.
22. Father Hesburgh described preliminary planning for the Helen Kellogg Institute for International Studies which has been endowed by a \$10 million grant from the John and Helen Kellogg Foundation of Chicago.
23. An update on campus construction was offered by Father Joyce, who is chairman of the University's Building Committee. He said that bids are due Oct. 24 on two 250-bed student residence halls and on Nov. 27 for Stepan Chemistry Hall.
24. The board of trustees concluded its meeting by passing two technical resolutions and adjourned at 5:44 p.m.

James E. Murphy
Associate Vice President-PR&D
Briefing Officer

faculty senate journal september 12, 1979

At 7:30 p.m. the chairman, Prof. Kenneth E. Goodpaster, called the meeting to order in Room 202 of the Center for Continuing Education. Goodpaster offered a prayer, and noted that flowers had been sent from the Faculty Senate to Prof. Steven W. Hurtt who is hospitalized. He apologized for the late arrival of the senate agenda despite it being sent out a week in advance of the meeting. Goodpaster reported that Prof. Albert H. LeMay has been serving as acting chairman of the Committee on Student Affairs. He requested that for the benefit of the senate secretary, all members should state their names before speaking and that copies of all lengthy statements and reports be given to the secretary. The Journal for May 2, 1979 was approved with minor modifications.

Goodpaster began the chairman's report with the announcement that Rev. Theodore M. Hesburgh, C.S.C., would continue this year the tradition of speaking with the senate on the evening of his annual address to the faculty. Goodpaster said that senators would receive notification about this special meeting of the senate, and that it would not replace the scheduled October meeting. He reported that Robert Miller, director of libraries, has requested to address the senate, and that he probably will be scheduled to speak at the November meeting, and that a request was received from Beth Imbriaco, academic commissioner of student government, to speak to the senate this year about the pass/fail option.

Goodpaster noted that the executive committee had met over the summer to review the results of the survey of senate members and to prepare a questionnaire for a general faculty survey. He distributed the results of the senate survey conducted last spring and pointed out the high priority assigned to a general faculty survey by the senate membership.

Goodpaster described the interrupted agenda to be followed at alternate meetings of the senate this year. He felt that by providing an opportunity for senate committees to meet periodically on the evenings of senate meetings, the problem of committee meeting attendance would be overcome and the sharing of ideas and work would increase. He requested that any senator willing to serve as senate parliamentarian notify him during the break. Goodpaster reported that the members of the executive committee would be meeting with members of the University administration to discuss topics of mutual interest.

Goodpaster noted that he had met with Provost Timothy O'Meara on Sept. 10 to invite the provost to speak to the senate in the spring and to identify likely senate concerns over the coming year. These concerns included: the hiring and promotion of women and minority faculty, faculty salary and benefits, and faculty grievance and appeals procedures. At this meeting, O'Meara felt that progress had been made in the area of women faculty; that the upgrading of faculty salaries and benefits was a top priority of the University administration and that he would be receptive to guidelines for grievance and appeals procedures.

Goodpaster opened the discussion of the proposed faculty attitude survey by presenting a motion, moved and seconded by the executive committee, to approve the survey and to

charge the Committee on Faculty Affairs with its administration. He indicated that changes in the form of friendly amendments were welcomed, and that additions should be presented in specific statements.

In addition to the adoption of several changes in wording and a discussion of the questionnaire format and purpose, the following substantive changes in the questionnaire were discussed:

In response to the suggestion that a "no opinion" column for responses be provided, Sr. Margaret Suerth, O.S.B., recommended that this option not be included.

Prof. Robert A. Vacca's recommendation that a question on the role of the College Councils be added to the Governance section was accepted.

In response to Prof. Kenneth R. Brehob's recommendation that the salary breakdown be more detailed, Goodpaster noted that it was the feeling of the executive committee that the faculty might not respond to more precise inquiries about salary.

Both Prof. Robert L. Irvine and Prof. A. Murty Kanury emphasized the need for additional questions in the Teaching and Research section, particularly questions relevant to the experiences and concerns of faculty in the Science and Engineering Colleges. Goodpaster suggested that additional statements for the survey be formulated during the break for senate consideration.

Suerth called the question, and the amended motion of the executive committee was unanimously approved.

Prior to the recess for coffee and committee meetings, Goodpaster instructed the committees to discuss two or three items they will address over the coming year, and to delegate responsibilities for the investigation of these questions. He suggested that the Committee on Student Affairs select candidates for chairman from its ranks.

The meeting recessed at 8:15 p.m. and reconvened at 8:45 p.m.

Goodpaster reported that James T. Deffenbaugh would serve as senate parliamentarian for the coming year.

Irvine and Kanury suggested five additional statements to be included in the Teaching and Research section of the faculty questionnaire. With minor modification, four were approved by the senate for inclusion.

Prof. Vincent P. DeSantis moved that the two questions specifying retirement ages of 65 and 70 be dropped from the questionnaire. Prof. William E. Slowey seconded the motion. DeSantis argued that recent changes in federal regulations made these statements superfluous. A tie vote of the senate, 14 to 14, was resolved by a nay vote by Goodpaster, thus defeating the motion.

Prof. Michael J. Francis moved that the question specifying a 65 retirement age be dropped from the questionnaire. Deffenbaugh seconded the motion. The motion was approved.

Speaking for the Committee on Administration, Francis identified the questions the committee will be concerned with this year. These are: the hiring and promotion of women and minorities and the operation of the University committee on affirmative action, the implications of recent retirement legislation and the question of continuity in University administration.

Speaking for the Committee on Faculty Affairs, Prof. Irwin Press reported on the activities the committee plans to pursue this year. These include: a comparison of Notre Dame faculty salaries and benefits with those at peer institutions, the administration of the faculty attitude survey and the development of guidelines for appeals and grievance procedures.

Speaking for the Committee on Student Affairs, Prof. Albert H. LeMay emphasized that the committee would be open to suggestions directly from students on topics for investigation. Prof. James J. McGrath, C.S.C., recommended Prof. Stephen M. Batill for chairman of the Committee on Student Affairs. There being no other nominations, Batill was elected by acclamation.

Goodpaster suggested that the senate committees contact the University Committee on

Education for Justice which is investigating many of the same issues identified as senate concerns.

Under Old Business, Prof. Michael J. Crowe reported on the work of the ad hoc committee which was organized last year to study the procedures employed at the University to fill higher administrative positions, particularly the role and function of search committees. The committee, composed of individuals who have recently served on search committees, has held five meetings, including one with DeSantis and O'Meara. They conducted an extensive literature search, solicited views from the faculty, contacted other universities and followed up with a questionnaire to 10 institutions and reviewed the relevant sections in the Faculty Manual. Crowe reported that the members of the committee have reached a consensus on recommendations for substantial revisions in the Manual, and that these would probably be submitted in November. He noted that when the report was completed, it would be submitted to the senate for its acceptance or rejection whence it would be transmitted to the provost. Goodpaster thanked the committee on behalf of the senate for its hard work.

There being no New Business, the meeting was adjourned at 9:15 p.m.

Those absent but not excused were: Kenneth L. Grant, mathematics; John J. Kennedy, marketing, Rufus Rauch, emeritus; J. Kerry Thomas, chemistry; Phyllis Webb, microbiology.

Respectfully submitted,

James G. Neal
Secretary

minutes of the 190th graduate council meeting may 16, 1979

Approved at the 191st Graduate Council Meeting on Oct. 24, 1979

The chairman called the meeting to order at 3:35 p.m. and introduced John R. Lloyd, Robert L. Amico and Patrick Horsbrugh to the council. All members were present except the following: Dean Joseph C. Hogan (excused), Charles W. Allen (excused), John W. Lucey (excused), Henry C. Mitchell, Maureen A. Monaghan.

I. MINUTES OF THE 189th MEETING

The minutes of the 189th Meeting were approved with one minor revision. The emended sentence in section II, second paragraph, now reads: "The external reviewers call for greater efforts to increase the status of the Music and Liturgy concentration as Notre Dame may well become a national center for such study."

II. REVIEW OF THE GRADUATE PROGRAM IN ENVIRONIC DESIGN

David C. Leege, who was called upon to present the University Review Committee's final report on the graduate program in Environic Design, opened his remarks with a reference to the COUP Report recommendation in the early 1970s with regard to the future of this program. The University at that time decided that the program be given more time to prove itself. The program has been in operation for 10 years, and the review provides an opportunity to determine how the program has developed since the COUP report. Leege described his committee's final report as an effort to summarize and integrate the major points addressed in the external reports and the departmental response, with comments on the adequacy of the response. He outlined four options for the future of the program and discussed the preferred two at length.

Leege briefly highlighted a number of areas of concern. The admission of students from a wide variety of baccalaureate backgrounds has resulted in a number of students' failure to successfully complete the CE 463 course. The program on the whole emphasizes philosophies and conditions rather than the acquisition of "tools of analysis" and specific skills. Theses prepared by students in the program are more reminiscent of "independent study reports" than "scientifically based theses." One external reviewer recommended remedial work ("a postbaccalaureate holding tank") for incoming students with deficient backgrounds until they can meet the skill requirements of core courses. All reviewers noted the virtual absence of professional publications, as well as the absence of outside support for faculty research and student theses. According to Leege, the point made by the reviewers is that the program is utilizing "an inappropriate mode of graduate instruction, a mode that is itself contributing to the budgetary

constraint." Leege reported that two of the external reviewers did comment on the success of the program's placement of students. The reviewers noted that the program is a one-man operation and expressed some doubts that it could survive without reform. They advised the creation of a multidisciplinary committee to guide the program as a whole and, in particular, to assist in thesis supervision. They were uneasy about the administrative location of both the program and the Department of Architecture in the College of Engineering. Leege concluded his presentation with the recommendation that this department be granted greater administrative autonomy.

John R. Lloyd supported Leege's concluding recommendation of greater administrative autonomy for the Department of Architecture. He believed that the relationship between the environs program and the department cannot continue as it is. Lloyd stressed the importance of acquisition of specific skills and said that "depth cannot be sacrificed in favor of breadth."

Professor Robert L. Amico thanked the council for the opportunity to elaborate on his remarks in the first part of the Departmental Response. He enumerated three characteristics necessary to bring excellence to the Department of Architecture:

- (1) improved undergraduate education.
- (2) development of graduate education, research, creative activity and service, and
- (3) development of degree programs in allied disciplines and structure within the University.

Professor Amico said that he would classify the program in environs among the "allied disciplines." He stressed that what is in question is not the need for interdisciplinary programs in environmental studies, but rather "the environic program in its current state."

He recommended the following measures:

- (1) an immediate moratorium on graduate admissions to the program in environs,
- (2) continuation of the University's responsibility to current students in the program until the completion of their studies at Notre Dame, and
- (3) the development of a five-year plan for an interdisciplinary program in environmental studies "in light of overall University priorities and the department it resides in."

Professor Amico concluded his presentation with detailed and specific recommendations concerning this future interdisciplinary program in environmental studies.

Professor Horsbrugh, who next addressed the council, appeared to favor Alternative 2a as outlined in the University Review Committee's Final Report (i.e., "Absorb the program more directly into the Department of Architecture (a) by making it one field of concentration in a multiple battery of M.A. options offered by the department, including Architecture, Landscape Design, Urban Planning, and Environic Studies"). He took up the issue of depth vs. breadth and expressed concern about the split between specialists and generalists through increasing emphasis on specialization. He stressed the importance of "strategic generalization," and that "environs provides the essential context for specializations." He, finally, called for the development of a combination of graduate programs in architecture, planning and design "in the environic context."

The chairman, then, opened the meeting for discussion.

Robert L. Irvine provided the council with information on the number of environs students who completed the civil engineering core course (CE 463) as compared to the number of those who enrolled in the course, since 1974. He stressed that students had been encouraged to stay in the course, yet several decided to drop after the first class. He said he was not aware that this course was part of the core program and was not against dropping this requirement for environs students. He asked how essential environs is to the broad development of graduate programs in architecture. Professor Amico stated that "Environs is of course important if the question is in regard to the development of allied graduate degree programs in our department and of course less important as it pertains to the development of graduate degree programs in our discipline." He added that "the environic program, of course, is important to our department and others if offered as a graduate program in the University." Other council members joined in the discussion about the usefulness of the training provided by the program, the criteria for student selection and the appropriateness of granting the master of science degree to students completing this program.

The chairman believed that it would be difficult to obtain additional resources outside the department in support of the program as it now stands. He recognized the merits of the program. It is a "people-oriented" program conducted through "tutorial sensitization." The aim of the program is to enhance the potential of students who already possess some degree of professional maturity and to expose them to "a broader picture"; to teach them "leadership and overview skills." The program has done well for the kinds of people who have gone to the program. But in its current structure of course offerings, it can no longer be advertised as an interdisciplinary program. He suggested that the council consider a moratorium on admission to the program.

The council discussed the viability of various alternatives set forth in the University Review Committee's Final Report. The suggestion of a moratorium on admission again emerged. The chairman explained that this motion, if approved, would not result in dissolving the program. It would give the department and the University time to consider the various options in regard to the future of the program, and to make the necessary planning for implementation, if necessary. He also noted that there would not be a time element attached to the moratorium.

It was, then, moved that a moratorium be called on the admission to the Environics program effective fall 1980, while the University would continue its commitment to current students admitted up to the academic year 1979-80. This motion was seconded, put to a voice vote and carried unanimously. The Final Report (Report D) and the Departmental Response to the external reviewers' reports (Report C) were also separately votes on and passed.

III. ADMISSION TO DEGREE CANDIDACY

The list of applications for admission to degree candidacy for master's and doctoral programs was presented to the council and unanimously approved. It was recommended that the Graduate School send a copy of the approved list to respective departments for future references.

IV. OTHER BUSINESS

No other business.

V. CHAIRMAN'S REMARKS

The chairman advised members that the council would meet about five times next academic year, and that one of the major topics for deliberation would be the future of the review program and the review process.

He announced that the following had been elected to a three-year term on the council:

Michael J. Crowe	(General Program)
Andrew J. Weigert	(Sociology and Anthropology)
John E. Derwent	(Mathematics),

and that Rev. Thomas E. Blantz had been appointed to replace Robert L. Kerby who was going on sabbatical leave.

The chairman expressed some concern regarding the state of enrollment in the Graduate School. He notes that while the total head count of students enrolled fluctuated around 1,200, the number of students in degree programs (as opposed to the number of students in nondegree programs) was dropping. Additionally the FTE enrollment has dropped from 714 in 1975-76 to an estimated 691 in 1978-79. Since the number of University-supported FTE tuitions has increased in the same period, there has been a marked decline in the number of self-supported students. "Our ability to claim resources in the budget", the chairman said, "is in part related to our contribution to that resource pool. Hence, my concern for the reduction in cash flow via the Graduate School."

In terms of student recruitment, the chairman observed that the level of the stipend is one of three factors that are important, but no one is more important than another. The other two are: quality of the graduate program and national visibility of the faculty. "We have much room to move in all three factors", the chairman added, "and we should be constantly aware of that fact."

The chairman expressed the Council's appreciation of the contributions made by the outgoing members, namely Robert L. Kerby, John G. Borkowski, Morton S. Fuchs, Anthony M. Trozzolo, Robert L. Irvine, Henry C. Mitchell and Maureen A. Monaghan.

The meeting was called to a close at 5:15 p.m.
Chau T. M. Le, Secretary

Report D: Final Report Evaluations of the Graduate Program in Environic Studies

The external review of the Environic Studies Program took place on Oct. 29-31, 1978. The site visitation team consisted of: Larry W. Canter, director and professor, School of Civil Engineering and Environmental Science, University of Oklahoma; Edward J. Croke, director, Energy and Environmental Systems Division, Argonne National Laboratory and Professor Harlan E. McClure, FAIA, dean and professor, School of Architecture, Clemson University. The internal reviewers were the chairman, David C. Leege, director, Center for the Study of Man in Contemporary Society and professor of government; and the division representative, John R. Lloyd, professor, aerospace and mechanical engineering. Chau T. M. Le, assistant vice president for Advanced Studies: Instruction, coordinated the review. Professor Patrick Horsbrugh, director of the Environic Studies Program, and Professor Robert L. Amico, chairman of the Department of Architecture, were those most deeply involved at all stages of the review: preparation of materials, response to site visitors' questions and response to site visitors' evaluations.

The site visitors benefitted especially from an extremely detailed three-volume report prepared by Professor Horsbrugh for the review. None of the site visitors considers his primary interest to be environics; yet all are respected for their work in the fields that occupy some of the intellectual domain of environics. Professor McClure had extensive previous knowledge of Notre Dame's programs in architecture inasmuch as he was a site visitor for the NAAB accreditation team in 1974. Croke also had some exposure to Notre Dame's advanced studies programs by virtue of his work and Notre Dame's involvement with Argonne Laboratories. Only Canter had no knowledgeable previous contact with the University. All external and internal reviewers had studied the documents carefully and arrived with specific agenda. Their information needs were satisfied with slight modifications in the schedule.

Late in their visit, the external reviewers achieved considerable consensus on the program's strengths, weaknesses and alternatives for the future. This consensus is also reflected in their independently submitted reports by their common subject matter or by deferrals to the anticipated content of a colleague's report. Unfortunately, the independent reports arrived at different times, with the last being submitted two months beyond the deadline. Concerned about its own deadline, the department and program director apparently chose not to summarize and confront the major points of the reports, but to offer a lengthy response on individual comments contained within each report. The departmental response consists of a short background section written by the chairman and two-and-one-half pages of recommendations (pp. 19 bottom to 22 top); the remainder of the 29 pages is specific rejoinders by the program director. Given these circumstances, the internal reviewers have sought to summarize the major points addressed in the external evaluations and to abstract where possible, the departmental response, with our comments about the adequacy of response.

The Environics Studies Program has had a 10-year life at Notre Dame. In 1963 Visiting Professor Julian Kulski proposed an interdisciplinary program leading to the master of urban planning degree. While located within the Department of Architecture, the program was to have been guided by an interdisciplinary steering committee. No formal action was taken on this proposal, but by 1967 Prof. Frank Montana, chairman of architecture, formally proposed the Graduate Program in Environic Studies to the Graduate Council. At its Nov. 3, 1967 meeting, the council discussed the proposal for "about an hour" and approved the proposal "without dissent." The proposal suggests the program as a response to the "... national emergency concerning the declining health of the urban environment, and scarcity of national resources." It sought to produce "Individuals of conviction, knowledge, authority, and grace...to provide leadership and direction..." regarding these problems. The proposal placed considerable emphasis on the program's interdisciplinary nature, detailing a wide range of undergraduate degrees that would prepare students for admission, and listing graduate course offerings from numerous departments and colleges. Noting that "design" was a common focus of the program, the proposal found it natural that the program be accommodated within the Department of Architecture in the College of Engineering, but it also took pains to stress that policies and philosophies are as important as plans, and that much of the program would derive from other sources in the University. Regarding faculty, the proposal makes references to faculty in architecture, short-term visitors and others who teach supplementary courses elsewhere in the University. No specific mechanism for program direction was outlined. Finally, the proposal is quite explicit about funding: "The program is intended to be sustained by private funds and Federal grants arising from the immediate relevance of the courses to be offered"; the proposal details numerous sources for funds and it describes interests the funders would have in the program. The proposal

asks for teaching assistantship monies, but suggests that funds for this purpose will come from external benefactors; it also requests \$5,000 per year for three years to purchase library and related research materials. Nothing else was said of University financial commitments.

The program commenced in September 1968 with three students under the direction of Professor Patrick Horsbrugh. Consistent with the proposal, environic courses were offered by the Department of Architecture, appropriate core courses in other departments were designated and elective courses were suggested. Students from the wide range of disciplinary backgrounds envisioned were recruited. Thesis procedures were developed. As external reviewers note, one of the primary departures from the proposal was that external funds were not generated; only one grant early in the life of the program was received and the program has relied on small contributions from Professor Horsbrugh's Environic Foundation to give it discretionary leverage.

In the early 1970s, the Committee on University Priorities recommended that the program be discontinued. Senior administrators of the University, however, chose not to implement the recommendation; they felt that the societal need for the program continued and its goal to produce broadly-trained environmental strategists rather than narrow specialists was admirable. They felt the program needed additional time to develop a cadre of interested faculty; attract, train and place qualified students and have an impact on the emerging field of environics. At the present time, however, these administrators welcome the opportunity presented by external visitors' evaluations, both raising and answering "hard questions."

The "hardest" questions concern the structure and continuation of the program. We will first summarize the alternatives outlined by the external reviewers. Then, we will summarize and examine common points in their specific evaluations of the program.

The alternatives seem to be the following:

- (1) Continue to operate the program as it is currently handled. All reviewers, the department, and the program director reject this alternative.
- (2) Absorb the program more directly into the Department of Architecture (a) by making it one field of concentration in a multiple battery of M.A. options offered by the department, including Architecture, Landscape Design, Urban Planning, and Environic Studies or (b) by making it an abiding presence in a more conventional master of architecture or master of urban planning program. Dean McClure and the department appear to favor the former. Professor Horsbrugh appears to favor the former, but with the environics emphasis as the keystone to the entire battery. Croke appears to favor the latter option.
- (3) Reform and strengthen the program through creation of a broadly-based faculty steering committee to (a) screen incoming students, (b) select program courses and advise students on courses, (c) assist on theses, and (d) create additional opportunities for student research in interdisciplinary, problem-centered studio contexts. Included in this recommendation is a concern with increased University financial support for additional faculty, secretarial staff, physical resources, etc. The recommendation stems especially from the concern that the program is not currently multidisciplinary in the sense that students learn skills from a variety of disciplines which help both to inform broad environmental and design critiques and to provide the tools of analysis requisite for specific professional assignments. Recurrent throughout the reviewers' comments is a preference for this option and, even if Alternative 2 were to be adopted, this emphasis on skills should pervade the new program or battery of programs. The departmental response does not clearly address this option--except to call for additional faculty and financial resources. The program director's response is (a) deeply concerned that an emphasis on skills would undermine the breadth of the program and (b) skeptical that a wider committee of either architecture faculty or faculty from other colleges could improve the administration of the program, given the "lack of rewards" for interdisciplinary work at the University.
- (4) Phase the master of science in environic design out by (a) converting the program into an institute that does not offer a degree or (b) dismantling the program and recognizing its incumbent director as a University resource who would range widely as a missionary for environic concerns in undergraduate and graduate courses and research. Canter appears to favor the latter option above all others because of the University's limited financial resources, the incumbent program director's strengths as a University resource and the program's lack of track record in attracting the external funds needed for an institute to achieve its purposes. Croke does not tip his hand either

way on these options. Dean McClure does not favor phasing out the degree program through either of these options but does insist that it be strengthened by adoption of either/both Alternatives 2 and 3. Both the department and the program director are attracted to the institute option and suggest immediate exploration of "funding, staffing, and resources"; neither addresses directly its implications for the discontinuance of the M.S. degree specifically in environic studies.

Several general concerns about the Environic Studies Program lay behind these alternatives. Clearly, all reviewers are impressed by the vision, diligence and charismatic teaching qualities of the program director. Croke, in his report, and the other reviewers, in their site visit, expressed their satisfaction with the quality of the positions those who had completed the program were attaining. The reviewers were impressed by the tutorial nature of the program and the apparent capacity of the tutor to instill self-confidence and nurture leadership skills in the students. Something special does happen to them during their period in the program. Nevertheless, the three reviewers and the department itself appear to disagree with the program director on (1) whether the concerns embraced by the program are that radically new to the disciplines related, in one way or another, to "environics" and (2) whether these disciplines have the internal capacity to integrate environic concerns into conventional or evolving degree programs. Finally, all connected with the review consider the departmental budget as extremely low and the teacher-student ratio as extremely high, if not scandalous; the department and program are on starvation diets. Yet, as the alternatives presented above indicate, money and additional staff alone will not solve the problems of the current Environic Studies Program.

Perhaps most recurrent in the reviews are ramifications of the breadth-versus-depth arguments. The program director has purposely followed admissions policies that encourage students from a wide variety of baccalaureate backgrounds with many coming from the liberal arts, has designated core and elective courses that are intended to expose students to philosophies and conditions rather than tools of analysis and has stressed independent study on a thesis topic of interest to each student at time of admission. The reviewers find all of these practices admirable to a degree, but problematic to the point where the legitimacy of the program is at issue.

The reviewers argue that insufficient commonality in undergraduate student backgrounds makes the students unable to take full advantage of core courses drawn from multiple disciplines. The program director carefully reviews all applications, and all those accepted for the program meet his standards for program admission and the University's standards for admission to graduate status. Yet when they enroll in core courses many have difficulty performing to the expectations of faculty teaching these courses. The program director's response is that the phenomenon is concentrated heavily in one civil engineering course which he and the department recommend be dropped from the core; is isolated to individuals, especially foreign students, in other courses; and is in any event based on the failure of these faculty to understand the needs of the program students. The faculty interviewed by the reviewers argue that graduate students should have sufficient background to meet the requirements of entry-level graduate courses which are key to their programs. The reviewers advise that remedial undergraduate course work may be necessary and that the program recognize the need for, in Dean McClure's words, "a postbaccalaureate holding tank" until the student can meet the skill requirements of core graduate courses. They caution against frequent redefinitions of core requirements when personnel in other departments change: students should have sufficient familiarity with how a sociologist or political scientist or civil engineer addresses a problem that they can make knowledgeable critiques of reports and resulting policies. The proposed changes in curriculum discussed in the three-volume work and the changes recommended (and not recommended) in the departmental response appear to run in the opposite direction from the need perceived by the reviewers.

The skills issue looms very large with the reviewers. They do not find in the program design a balanced emphasis between breadth and depth. There is much emphasis on outlook, little emphasis on skills. As one reviewer suggested during the site visit, the country would be ill-served by an environics graduate who did not have sufficient understanding of how nuclear engineers measure risk to be able to make a knowledgeable assessment of their environmental impact statements. The reviewers, all of whom were deeply interested in the theses, note that the master's theses faithfully follow the design and process prescribed by the program director, but they lack a clear problem statement and a systematic approach to addressing the problem; they lack original data collection and analysis, and are more reminiscent of "independent study reports than scientifically based theses." It is important to recall that scientist, engineer and humanist join in this critique.

At a minimum the program needs provision for remedial work in the skills of analysis

found in related fields, needs emphasis on skills courses in the core curriculum and needs sustained attention to problem formulation and analysis by thesis committee members in addition to the program director, early in the development of the thesis. The program director has little confidence that the last will occur in Notre Dame's department-centric atmosphere.

The second set of problems in the current program is related--viz., faculty research. Graduate degrees are awarded by faculties actively engaged in scholarship or the production of "works" that meet juried standards. Graduate theses often emerge from projects involving students and faculty in joint creative endeavors. Neither appears to be the case with the Environic Studies Program. The external reviewers note the virtual absence of publications or works deriving from program faculty, as well as the absence of project support for faculty research and student theses. They note that the department is heavily overburdened with its teaching load and that lack of public scholarship is a characteristic of the program and the department. In turn, the department and program director respond that public scholarship cannot be expected under such circumstances. But the reviewers go further. They insist that graduate-level instruction and scholarly research or works are inseparable. Dean McClure, as an architect, speaks most relevantly to the problem: "Further, it does not appear that faculty efforts in environics have been directed measurably towards giving the students environmental design problems in the normal studio context." Later he elaborates on the implications for reform: "However, at graduate level, research and public service become exciting real-world modes for instruction, and this could apply equally to environic design. Thus it would not be an abandonment of teaching emphasis to undertake the solution of funded public service projects.... Research and public service projects, whether they are used as educational vehicles or not, are normally brought to a written conclusion. This type of publication could be used effectively in public relations, and in other ways to add luster to the school, and this could secondarily help in finding greater resources and recruiting better students." The point is not simply that tight budgets generate heavy teaching loads; the point is that the Environic Studies Program, even within its budget constraints, is utilizing an inappropriate mode of graduate instruction, and a mode that is itself contributing to the budgetary constraint.

The program director also responds to this deficiency by noting the frequency with which he is asked to make public addresses and symposium presentations elsewhere. Reviewers recognize this as a sign of respect for his vision and prominence in the field, but they do not view it as an answer to the need to join faculty and students in scholarly efforts that meet juried standards. The internal reviewers react with deep concern to the implications of the Response, p. 24, first full paragraph, as captured in these lines: "(The program director) compensates for this imposed deficiency by preaching what he has practiced. Since much of this practice was of a pioneering nature, confirmed by subsequent events, he may still be considered an initiator." "Preaching" from the public platform or the classroom can never replace "practice"--i.e., the disciplined confrontation of new problems or rethinking of the old in laboratory, studio, or real world research settings. It is doubly harmful in a program where one person supervises all theses, and other committee members do not become directly involved until the reading stage. We suspect this same propensity was captured by external reviewers and inclined them away from the alternative of forming an institute.

An observation regarding the placement of students is in order. The program director expressed deep disappointment that the external reviewers did not give greater consideration to the kinds of professional positions graduates of the program attain. Indeed Dean McClure makes scant mention of the matter in his report; Canter and Croke, however, devote considerable attention to the topic. They note that past students are intensely loyal, appreciative and highly inspired by the program director. They also note that former students feel the program gave them a broadened perspective they would not have acquired in another way. They suggest that former students do not identify any special skills for professional performance that they acquired in the program. Finally they note, that a reasonably large percentage of the students are older than most entry-level graduate students, have had a previous career often in an architecture or planning profession and view the program as an add-on--as something that integrates previous professional/life experiences. These reviewers conclude that such individuals receive the greatest benefits from the program, and imply that the program's placement experience should be evaluated against similarly matched control groups. This does not in any way deny the success of the program's placements. It does, however, have clear implications for student recruitment strategies. The program brings out the best qualities in those who have best qualities; in competitive labor markets, employers look for these same qualities and are more likely to find them in mature and self-confident individuals.

The external reviewers see no future for the Environic Studies Program as a one-man

operation. They express concern that retirement or an act of God could leave the program leaderless and doubt that it could survive without immediate reform. They advise that a committee representing different concerns within architecture or a multidisciplinary committee representing environics-related fields in the University be empowered to guide the program. Both they and the program director note that a decade of effort by the program director to recruit faculty and secure program elements has yielded little cooperation and continued instability in course selection. All blame it on the department-centric "reward" structure at Notre Dame but offer little insight on how to restructure the situation. Given the situation, the reviewers seem to favor greater program involvement by one department--Architecture. The program director is skeptical whether that will occur unless the proposed battery of M.A. programs is approved. Further he appears not to be alarmed: "Since (his) practical experience combines the three principal planning and design professions, and involves further experience in the realms of politics, law, education, and the arts and history, the charge of deficiency in multidisciplinary effort is rejected." The external and internal reviewers are concerned that eventual successors to the incumbent program director will not be so amply endowed and urge committee guidance for the program.

The external reviewers are uneasy about both the administrative placement of the program and the location of the department of Architecture in the University's College of Engineering. After reviewing the program's history and current status, two of the reviewers pass by suggestions that it be located in another department, college, or be free-floating in favor of its solidification within Architecture; the third recommends its discontinuation. Further, all reviewers feel the degree is currently mislabeled as a "master of science in environic design." Insufficient attention is addressed to the acquisition of scientific skills; absent curricular and thesis reform, the degree should be called an "Arts" degree. But we also sense an uneasiness in the reviewers regarding the relationship between Architecture and the College of Engineering. Dean McClure spoke bluntly to the point both in committee sessions and in the provost's office: "If I were on an accrediting team visiting Notre Dame, the Department of Architecture's accreditation would be jeopardized by its budget and teacher-student ratio." The dean of engineering, noting the presence of advanced studies programs in all engineering departments, has encouraged Architecture to develop its own master's-level program. He attributes some of the department's funding problems to the absence of a clearly-delineated departmental graduate program. Whether that would be sufficient to improve the budgetary picture, the internal reviewers are uncertain. Dean McClure concludes his review with a strong plea for strengthening the architecture graduate program (and by that, the undergraduate program) by approving a battery of degree options proposed by the department, and by granting the department greater administrative autonomy, occasionally using the language of a "school." The departmental response welcomes these recommendations, notes their consistency with its own goals (points 1-3, page 2), and points to its plan for integrating the Environic Studies Program into three other graduate emphases (pp. 20-21).

The internal reviewers, having given careful consideration to the reviews, conclude that slight programmatic modifications will satisfy neither the University's goals of excellence nor the program's objectives. We view the current decision stage as an "either-or" juncture: either the University should phase out the program according to alternative 4(b) or it should reform and absorb the program more directly into Architecture through a combination of alternatives 3 and 2(a). If the latter is thought desirable, concurrent attention should be given to the possibility of granting "school" status to Architecture either within or outside the College of Engineering.

David C. Leege
Committee Chairman

John R. Lloyd
Division Representative

faculty committee for university libraries minutes september 17, 1979

Present:

Harvey A. Bender, Vincent P. DeSantis, John W. Lucey (chairman), Robert C. Miller and James E. Robinson.

The minutes of the meetings of July 10 and Sept. 4, 1979 were amended and approved for publication. It was agreed that a listing of only those members would appear in future minutes.

Miller distributed to committee members for discussion and comment a schedule of hours of

opening for the University Libraries during the Christmas holidays this year. These will be published in the Notre Dame Report. Miller stated that changes in this schedule would occur only if he could not get absolute verification of janitorial service and heat during the period. He also mentioned that the schedule for the science and engineering libraries is dependent upon the respective buildings being open. If the building is closed, the library will also be closed.

Miller shared with committee members recent discussions regarding use of study carrels by TA's and GA's as offices. The committee reaffirmed its position that study carrels are for use by doctoral students while writing their dissertations and not for office space. Bender suggested looking for additional space on the 5th and 11th floors since the shortage of office space for these TA's and GA's in Arts and Letters seems to be a desperate situation. Miller said on the 10th floor (north and south walls) there are about 10 carrels which the library could make available for use as offices for these people; but since these carrels are already allocated to individual departments, the departments would have to make the decision as to priorities: do doctoral students writing dissertations or TA's and GA's in need of office space get the assignments. A motion was made and seconded: "that within the established departmental allocations TA's with responsibilities for courses be permitted to use carrels on the north and south walls of the 10th floor as office space; and, that the prohibition of such use of any other carrels will be strictly enforced." The vote was four in favor and one (DeSantis) opposed.

The working draft policy on ephemeral materials was explained to committee members. Miller said that additional policies will be developed to explicate the statements. The committee members agreed to adopt the statement as a codification of what the libraries should do in this area.

The draft five-year Libraries Development Plan was issued to the committee. Further discussion of the plan will take place at the next meeting.

It was suggested that the faculty committee and various members of the library faculty present an "open forum" meeting for students and/or faculty sometime in January or February.

Lucey suggested that agenda items for the coming year include: an ongoing discussion of the Libraries Development Plan and budgeting models.

The next meeting is scheduled for Monday, Oct. 15, at 3:30 p.m.

The meeting adjourned at 4:45 p.m.

report on bibliographic control and access in the nd libraries

"Bibliographic Control and Access in the University of Notre Dame Libraries: AACR-2 and the Future of the Card Catalogs"

(The following was written by James G. Neal, associate librarian and head of the Collection Management Department.)

The ability of the University of Notre Dame Libraries to provide effective and efficient bibliographic access to its collections through the card catalog is being seriously threatened. The imminent adoption of a new cataloging code and the closing of the card catalog at the Library of Congress has forced all large academic and research libraries that depend extensively on Library of Congress cataloging data to plan for the resolution of an increasing number of heading conflicts in their catalogs. These actions have also prompted a serious questioning of the usability and flexibility of the card format and broad interest in library catalog automation. Notre Dame cannot ignore these significant developments. We must begin to measure carefully their impact on our library services and costs, and to plan for better utilization of our machine-readable bibliographic data base.

* * * * *

Bill Jones, ready to go out to dinner, punches a few buttons on a hand-held keyboard and looks at his television set.

Onto the screen flashes a list of restaurants by type, from Armenian to vegetarian. Jones then taps out the number opposite the Chinese listing, this time on his regular touchtone telephone.

Immediately, his screen displays a list of Chinese restaurants, with addresses, phone numbers and special code numbers. Jones picks a new place he's heard of, punches its code number and the menu appears on the screen.

Jones heads out the door, but not before punching more buttons to check a bus schedule and the weather forecast. He takes his umbrella.

Though Jones is not a real person, his actions are not necessarily those in a science-fiction movie.

Using your TV as a data bank with almost unlimited capacity may be only a few years away....

These are the opening paragraphs of a syndicated Associated Press article that recently appeared in newspapers across the United States. It demonstrates how rapidly the computer is permeating and facilitating the American lifestyle. The computer can match us with a date, analyze our handwriting, allow us to cash a check at three o'clock in the morning, regulate the temperature in our homes. It stores our vital, credit, educational, income and countless other records about our pasts. And now we can even purchase a computer of our own to inventory the canned goods in the cupboard, balance the checking account or maintain the Christmas card list. As the computer touches more and more of the daily routine, expectations for its broadening application increase, acceptance expands, and convenience very quickly translates into necessity.

The computer's impact on the academic community has been equally pervasive. Course registration, personnel records, computer-assisted instruction, accounting procedures, and scholarly research in many subject areas are only several of the numerous applications of automation in higher education. The one campus facility that lends itself perhaps most ideally to the use of the computer is the academic library. The efficiency and effectiveness of the many bibliographic files and other records which are maintained in the library to support technical operations and public services could certainly be enhanced by well-designed machine storage, manipulation and communication of the data.

Despite widespread recognition of both the reality and inevitability of computer-based library technology, for a variety of reasons, most libraries continue to cling to outmoded and inflexible manual systems. Even in cases where a process has been automated, too often it has not served to transcend, but rather to reinforce and perpetuate the traditional methods and theories of bibliographic control.

The library card catalog is a prime example of a traditional technology undergoing close scrutiny. Its service to five generations of library patrons is testimony to the advantages and usability of the card format. But with the development of viable alternatives, there is a growing concern in libraries across the country over the size, unwieldiness and cost of ever-expanding card catalogs. This concern has been intensified by dramatic developments in the bibliographic and economic environment, and by the impending implementation of massive and far-reaching changes in cataloging procedures on both the national and international level.

It is the motivation to stabilize costs while at the same time to maximize the scope of information provided to patrons, and to avoid widespread duplication of effort that have dominated the search for catalog alternatives. It is the increasing availability of sophisticated library-devoted technology and a recognition in the library of growing user expectation and acceptance of new mediums which allow us to criticize so fundamentally the card catalog and to anticipate the evolution of an essentially new and more responsive bibliographic control system.

Academic and research libraries have been confronted in the 1970s with a series of extraordinarily complex bibliographic developments which have defied easy accommodation. The resulting problems have been exacerbated by the continuing rapid growth of knowledge and literature and persistent pressures for fiscal accountability. The "information explosion" has meant that libraries will increasingly purchase a diminishing percentage of the materials they require to satisfy user needs, and will be forced to develop more effective systems for the sharing of resources. The combination of no-growth budgets and rampant inflation has compelled libraries to carefully review traditional objectives and operations, and to seek more economical means of improving service. Both trends have clearly demonstrated the growing functional interdependence of libraries.

One-time cataloging and the regularization of cataloging data have been a recognized goal for the bibliographic control of library materials for more than a century in the United States. The Library of Congress has assumed the leadership role in this area with the production and wide distribution of Library of Congress catalog cards, the rapid expansion of its acquisitions, and the development of a bibliographic data base in machine-readable form (MARC). In addition, there is a growing American commitment to participation in efforts to achieve universal bibliographic control where each country takes responsibility for organizing its own publications and shares the data with other countries. The effective communication of bibliographic information depends upon the development of internationally acceptable standards in such areas as bibliographic description, headings used in cataloging, transliteration, item identification numbers, formats, etc. Standards increase the possibility of sharing, while the computer is the tool which makes it possible.

Within this shifting environment of increasing cooperation, internationalization, standardization and computerization, libraries are seriously questioning the significant amount of staff, equipment and space required to maintain card catalogs. The problems of large card files are numerous: rapid rate of catalog growth and difficulty and high cost of maintaining large files; poor editorial condition and the obsolescence of a great deal of the information; physical condition and security of the cards; the dilemma of attracting and retaining a qualified staff to carry out the repetitive tasks involved in catalog maintenance; layers of superimposed cataloging rules complicated by the card catalog's resistance to change; availability of the complete catalog at only one location; minimal understanding of user requirements.

In the application of the computer to the catalog, the objective is to overcome this increasing lack of usability, availability, flexibility and productivity with card files. The goal is a "self-refreshing" catalog that can be easily reconstituted when a term or heading is changed, and which enables searches by more than one access point at the same time. Another goal is a data base management system that controls records by eliminating separate files for each library function, and allows, for example, acquisitions, cataloging, circulation, serials check-in, etc. to draw from a single data base.

The essential element in such developments is the ability of the individual library to capture its bibliographic data in machine-readable form. This task has been greatly facilitated since the late 1960s by the establishment of automated catalog support systems like the Ohio College Library Center (OCLC). OCLC represents a shared bibliographic data base with on-line input and searching capabilities. It provides its members with access to Library of Congress MARC records augmented by bibliographic records input by individual libraries based upon their holdings. These data are used for interlibrary loan and collection development, but most extensively for the generation of computer-printed catalog cards for filing in the catalogs of the member libraries. Though these records are stored on the computer, the lack of automated catalog authority control in the OCLC system precludes its substitution for the card catalog. This demonstrates the important distinction between the computer's ability to maintain a cataloging data base and the difficulty of providing effective human-readable access to a file that exhibits logic and coherence.

Progress in libraries toward a catalog utilizing an automated data base has been significant over the past several years, especially with the expansion of computer-output microform (COM) technology. Not all efforts have been successful or economical, but the cumulative impact has been to provide the library community with invaluable experience to build upon. One would have anticipated that this steady advance would have continued and even accelerated and all libraries would have been able to gradually share in the progress achieved by the pioneer research libraries and networks. But a series of decisions made by the Library of Congress to implement extensive changes in its catalog and cataloging practices has abruptly interrupted this orderly pace and has precipitated in many libraries serious rethinking of automation timetables. Even those libraries that question the need for an immediate movement toward automation are rapidly preparing for a period of unsettling transition. The fact that representatives from major library associations and networks persuaded the Library of Congress to postpone these changes for one year attests to the gravity of the problems that are anticipated.

On Jan. 1, 1981, the Library of Congress will:

- adopt the new second edition of the Anglo-American Cataloguing Rules (AACR-2) and update all cataloging in machine-readable form, MARC records, to reflect these new rules.
- abandon the policy of superimposition adopted to facilitate implementation of the first edition of AACR in 1967, whereby previously established headings were not changed as required by the new rules.
- freeze the Library of Congress card catalog, and provide access to all works processed after Jan. 1, 1981, in a new catalog.
- continue to plan for the complete automation of the post-AACR-2 catalog at the Library of Congress.
- carefully evaluate all Library of Congress subject headings, and change all obsolete, offensive and inconsistent forms.

All libraries that rely in any substantial way on Library of Congress cataloging or participate in a data base like OCLC which adheres to standards based on LC practice (nearly 80 per cent of all material received at Notre Dame is processed with LC cataloging data) must be prepared to deal with the significant consequences of these actions. Unfortunately, as libraries gather information, examine the issues and response options, and establish local priorities and strategies, these efforts are seriously undermined by a lack of firm data in three crucial areas: the extent of the changes these new practices will produce; detailed, accurate and up-to-date cost information about the options; and the types of assistance OCLC will be able to provide its members. It is certainly disconcerting to realize that, while we are aware that these

changes will be a major event for large libraries in terms of costs, quality of service, organization and deployment of personnel and user reactions, we have a very imprecise understanding of the extent and nature of the consequences and solutions.

Cataloging represents a challenging intellectual exercise--the preparation of a bibliographic description of an item together with a choice of access points, the formulation of headings to be used in these access points, and the assignment of a physical location in the library. This task is carried out in accordance with prevailing codes and authorities, and with reference to the catalog of which the bibliographic record will become a component. The new edition of AACR represents a cooperative effort by the national libraries of the United States, Canada, Great Britain and Australia to create an international code for world-wide control of bibliographic data for all types of material. The primary goals were: to incorporate the multitude of changes to the 1967 rules into a single code, to reconcile differences in the British and North American versions, to provide additional rules for nonbook materials, to produce a code that could serve as an international as well as a national standard and yield records that would be more readily machine-readable. The result is a cataloging code that provides greater freedom for the individual cataloger to exercise judgment and interpretation, headings more in conformity with names as they are commonly known or appear in works, and increased potential for cooperative cataloging on an international basis.

In 1967, the policy of superimposition saved all libraries from the arduous task of wholesale catalog revision. When the new rules for headings were applied only to those headings being established for the first time, most of the difficulties of implementation were resolved. This compromise at the expense of full adoption has been abandoned with the new code--a policy which will produce a marked increase in the number of conflicts between local headings and AACR-2 headings as they begin to appear in MARC and the national networks.

Though the Library of Congress has reviewed AACR-2 extensively to ascertain ways in which the costs of implementation can be reduced both for LC and the library community at large, their conclusion is that the data created by the new rules cannot be interfiled in a catalog which now exceeds 23 million cards, and that the existing files cannot be changed to conform to the new code. They also feel that it is senseless to continue to file cards and maintain a large and expensive catalog maintenance staff when the same information is available in the MARC data base. Therefore, the Library of Congress has decided to close, or more accurately, freeze the card catalog. In effect, after Jan. 1, 1981, no new cards will be filed into the old catalogs and primary access to the acquisitions after that date will be by automation, though temporarily a new provisional card catalog will be organized.

Regardless of its size, type or mission, each library will be forced to carefully assess the impact of these changes on its ability to provide effective bibliographic services through its catalogs. Based upon this assessment, each library will have to choose between two basic alternatives: attempt to retain existing catalogs and organize procedures to integrate new headings with the old, or, follow the example of the Library of Congress and close card catalogs. This decision will be influenced by a host of local factors: financial capability, the physical plant, processing backlogs, user sophistication, editorial condition of the catalogs, level of staffing, percentage of bibliographic records in machine-readable form, long-term catalog goals, etc.

The card catalogs of all large libraries reflect the history of local processing practice, are replete with filing and bibliographic peculiarities and inconsistencies, and bewilder the patron with omni-present "library mystique." The catalogs in the University of Notre Dame Libraries are not exceptional. In the over 30 separate card catalogs and shelflists currently being maintained, we have filed close to six million cards. The main catalog in Memorial Library holds over half, or close to 3-1/4 million of these cards. In addition, there are numerous other specialized card files that have been set up throughout the library system. The rate of catalog expansion has been accelerating. Over the past five years we have added approximately one million cards to these catalogs. During this same period of time, nearly 200,000 cards or 20 per cent of the number of new cards have had to be corrected or withdrawn. Since 1976, we have obtained a large proportion of these catalog cards through our participation in the OCLC system. An additional benefit has been the storage of these bibliographic records in machine-readable form for over 60,000 titles. We invest approximately 30 hours each working day just for the sorting, filing and checking the filing of new cards. In excess of 20 per cent of our total cost of cataloging goes into the card catalog and its maintenance. As the files continue to grow, the upkeep will become even more expensive and the responsiveness to change will continue to decline. Clearly, the adoption of a new cataloging code and the adjustments to the other changes will be a complex and demanding task at Notre Dame.

If a library decides to continue with the present catalog structure, the methods for integrating anticipated heading changes will have to be organized. There are three basic options: retain the existing form for headings which have been established in the local catalog; connect the old

form to the new form with a system of cross-references; or correct the cards under the old heading to the new form and refile them at the new position in the catalog (for lengthy files, simply refile without correcting headings and use guide cards at the beginning of the file). Method one will require extensive editing of Library of Congress records, and consequently more processing staff, and will weaken the capability for sharing bibliographic data. Method two is equivalent to maintaining two catalogs in one, and assumes that the catalog user will find the cross-reference card and will understand what it means. Method three will prove very costly in terms of staff time and periodic catalog disruption as cards are shifted, but would maintain a high level of catalog integrity for the user.

Several academic and research libraries, after carefully reviewing the impact of these options, have concluded that the effective resolution of a significant number of name and subject heading conflicts in a single integrated card file would either be beyond the capacity of their catalog maintenance capability or be achievable only at the expense of other priority procedures and projects, and plan to close their catalogs concomitant with their adoption of AACR-2.

The decision to close the card catalog raises a number of fundamental questions: the criteria for closing--by processing date or imprint date; the format of the new catalog--card, book, COM or on-line; the relationship between the retrospective and new catalog--type and direction of linkages, problems with serials publications, how to handle multiple copies, new editions; authority control system requirements; the inevitable need for additional assistance for the catalog user; the disposition of the closed catalog; the handling of records not represented in the data base; and the future of branch catalogs.

Closing the card catalog and starting a new catalog, irregardless of the cross reference structure provided or the format selected, will create two important bibliographic files, separated for an indefinite period, which patrons will have to use with difficulty in order to access the total collection. On the other hand, time required for processing and file maintenance will be reduced, and users will be able to locate new materials with greater ease.

Confronted with such complex and momentous developments, we must realize that there are no ideal solutions, only compromises. Recognizing the inevitability of increased costs and the potential for serious service disruptions, we must resolve to create an environment hospitable to change and to seek out the resources necessary to accomplish an orderly transition.

As we take stock of the immediate situation, we must not lose sight of our longer range concerns and objectives--to organize a more effective and efficient bibliographic control and access system. Any library that does not have its bibliographic data base in machine-readable form by the 1990s may be inoperable. American society at large, and the academic community in particular will seek out modern facilities that can provide the bibliographic and information services they require, and will not continue to tolerate obsolete and unadaptable manual systems. The computer represents the most flexible tool we have for inputting information from many sources and for manipulating data to produce a broad range of products and services to serve a variety of uses. As the Library of Congress, our major source of bibliographic data, moves steadily toward the creation of fully automated files, we must be developing a similar capability.

Based upon an in-depth investigation of the developments described in this report, extensive discussions with members of the library staff and librarians at other universities, and an appreciation of fiscal and staffing realities, the following recommendations are presented. These complementary proposals seek to stimulate our progress from problem identification to problem resolution. They are based upon the premise that we must approach these changes cautiously but with the optimism that the decisions we make will improve ultimately the quality of service we provide in the Notre Dame Libraries.

1. In order to maximize our potential for cooperative and networking activities and to minimize long-term cost, we must adhere to national bibliographic standards, including Anglo-American Cataloging Rules as interpreted by the Library of Congress, LC Subject Headings and Classification, MARC formats, filing rules, romanization conventions, etc.

2. We must strive to produce all of our bibliographic records in machine-readable form, and to maintain our data base with up-to-date information including all changes and corrections.

3. With the adoption of the new cataloging code, the main card catalog in Memorial Library should be closed and a new temporary card catalog should be organized to receive records for materials processed after that date. Careful consideration should be given to the adoption of the new ALA filing rules in the new catalog as well as the structure of the new catalog. Staff time saved in catalog maintenance will need to be reinvested in handling heading conflicts at the OCLC terminals, maintaining a clean and complete data base, and developing a new authority file structure. Integration of AACR-2 cataloging into our present catalog will produce even greater complexity and user frustration than split files, and deny the library staff the

psychological advantage of the "fresh start" it needs so desperately. Given the present significant level of catalog errors, it is questionable whether we can successfully absorb integration procedures into the processing workflow without seriously neglecting the OCLC data base records.

4. The question of retrospective conversion of the card catalog should not be broached before we secure considerable experience with a small current file, and conversion technology and procedures are more fully developed.

5. An AACR-2 Implementation Team should be organized immediately to plan for the effective organization of the catalogs, including the physical rearrangement of the catalog area and the relationships between the split files. This group should include representatives from the technical service, public service and branch library staffs.

6. Local authority records will be crucial for the implementation of the new cataloging code. With the impact of "creeping" AACR-2 already being felt in the Catalog Department, planning should begin for the organization of a new AACR-2 authority file to include established headings, tracings for cross-references, and information on the source of the authority. The imminent availability of the LC automated name authority file in COM format and potential availability on-line through OCLC should facilitate this task.

7. A careful analysis of the impact of these changes on the processing workflow and catalog department staffing should be undertaken. This should include consideration of the logistics of heading conflict identification, usability of LC authority records on-line, retrospective updating of our OCLC records and the inclusion of holdings information in the data base record, branch catalog maintenance, split catalog linkage responsibilities, flexible staff scheduling, etc.

8. These developments will require an immediate improvement and expansion of our programs of library orientation and bibliographic instruction. In addition, greater efforts will have to be made to provide direct assistance to catalog users, perhaps by increasing the circulation of public service staff in the catalog area. Greater use and effective placement of explanatory signs at the catalogs may solve some patron problems. Change inevitably engenders resistance, and we must face the tremendous task of actively educating our users.

9. Rather than maintaining a resigned attitude to catalog limitations and frustrations, the public service staff must take a more active role in catalog planning. This will require that they achieve a detailed and current understanding of catalog organization.

10. Recognizing the difficulty of organizing detailed, accurate and current cost information, we should strive to make our participation in the forthcoming Association of Research Libraries program as productive as possible. The first task of the AACR-2 Implementation Team might be to assist our representative in obtaining the required data.

11. We must seek to involve a large number of our staff in relevant workshops and other training opportunities which would increase their understanding and ability to cope with these changes. We might even request INCOLSA to conduct a session at Notre Dame.

12. Planning for the utilization of our OCLC archive tapes in the production of a COM catalog to replace the temporary new card catalog should begin immediately. COM represents an excellent marriage of the micro and computer technologies and a perfect compromise between card inertia and on-line flexibility. It offers the advantages of easier catalog reorganization and broader catalog distribution. The plans of the University Computing Center to invest in COM equipment should be monitored very closely by the library.

13. We need a commitment to an automation plan, with the long-term goal (10-15 years) of developing an on-line computer system providing access to cataloging data via CRT terminals and capable of accomplishing the full range of bibliographic processes from a single machine-readable data base, with COM supplement and backups for the catalog function.

14. Various options should be explored for nurturing an understanding and acceptance of catalog alternative formats: making both the ACQUIS on-order data and LC Subject Headings supplements available to patrons in COM format; beginning experimental production of a COM union catalog, perhaps integrated with ACQUIS data, for use in the branch libraries; and when OCLC expands its public service component, providing for patron access to a terminal.

15. The achievement of these goals will require careful study and planning. We need a research/development position in the library to direct our automation efforts.

16. It is doubtful that we will be able to achieve our long-term goal of catalog automation on our own. Therefore, we must carefully evaluate our current cooperative memberships and explore

the potential advantages of other network groups. We should also take a more active role in these organizations, while perhaps even promoting new relationships (e.g., with Indiana and Purdue).

17. We must carefully foster the understanding and cooperation of various campus groups: the administration, the faculty, the Computing Center, and the students, and develop productive communication mechanisms.

18. We must actively monitor the products and services of the many companies working in the area of library computer applications. We should regularly solicit the latest information from these vendors and periodically invite several to Notre Dame to demonstrate their wares.

19. We must seek to prevent staff-related problems, inevitable during periods of disruption and change, and maximize staff commitment with proper planning, meaningful staff involvement, and staff development and information programs.

20. We must secure a more detailed understanding of our catalog users and their bibliographic requirements: amount of data needed, kinds of searches, reasons for success and failure, use patterns, etc.

21. The success of future catalog planning will require some blurring of traditional administrative and functional structures in the library. We will have to start thinking in broad library rather than narrower departmental terms, and be willing to pitch in and assume some new responsibilities and perform some new tasks.

22. This report should be widely circulated in the library and academic community for discussion and critical review. By the fall of this year we must be prepared to finalize our plans for AACR-2 adoption and to begin long-term planning for catalog automation.

(contents continued)

- 127 --National Institute of Education Organizational Processes in Education (No. FY80-71)
- 128 --Office of Education Arts Education Program (No. FY80-72)
- 128 --Office of Education Foreign Language and Area Studies (No. FY80-73)
- 128 --The Ford Foundation International Security-Arms Control and Soviet-East European Area Studies Fellowship Program (No. FY80- 74)
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