FALL ENROLLMENT REACHES 6,982
Enrollment in the University of Notre Dame's 123rd academic year for the Fall semester reached a total of 6,982, according to the Office of Academic Affairs.

Included in the totals were 5,831 undergraduates, 190 Law School students and 961 graduate students.

The Freshman class in 1964 totaled 1,593 representing more than 750 high schools in the United States and foreign countries.

COUSINS AND WHITE JOIN LIBRARY COUNCIL
Norman Cousins, president and editor of The Saturday Review, and Professor Helen Constance White, chairman of the English department at the University of Wisconsin, have been named members of the Notre Dame Library Council by Rev. Theodore M. Hesburgh, C.S.C., University president. The Council consists of book collectors, bibliophiles and authors who assist the University in obtaining rare books and outstanding collections for the new Notre Dame Memorial Library.

P. C. REILLY LECTURES STARTED
Dr. Stuart A. Rice, professor of chemistry and director of the Institute for the Study of Metals at the University of Chicago, opened the annual P. C. Reilly Lecture Series at Notre Dame with three talks October 5, 7 and 8.

Dr. Rice discussed the “Excited States of Molecular Solids” at all three sessions.

The annual series of lectures by outstanding chemists and chemical engineers was established in 1945 by a gift of more than one million dollars from the late Peter C. Reilly, Indianapolis industrialist and a member of Notre Dame's Associate Board of Lay Trustees.

CAPONIGRI IN MADRID
Dr. A. Robert Caponigri, professor of philosophy at Notre Dame, has been named a visiting professor of philosophy at the University of Madrid for the 1964-65 academic year.

Caponigri will lecture on American political philosophy at Madrid and will prepare a book on the history of Spanish thought since the revolution in 1939. His Modern Catholic Thinkers has been translated into Spanish and Portuguese.

LOBUND GETS $9,900 GRANT
The Michigan Cancer Foundation of Detroit has awarded the Lobund Laboratory at the University of Notre Dame a $9,900 grant to support a program of research on viral leukemia.

The investigations, conducted on germfree animals, will pay particular attention to the mechanism of the disease and its prevention, Dr. Morris Pollard, director of Lobund, reported. The role of endocrinological mechanism in initiating and controlling the disease also will be studied.

FATHER WARD'S BOOK PUBLISHED
Rev. Leo R. Ward, C.S.C., professor emeritus of philosophy at the University of Notre Dame, has written a new book, Federal Aid to Private Schools (Newman Press, Westminster, Md.). Father Ward reports an incredibly rapid change in the climate of opinion on this controversial subject, but states, “the tide of better-informed opinion at this time is running to the side of reconsidering the possibility and advisability of some aid to private schools.”

PRESS PUBLISHES BOOK ON THEOLOGIANS
The lives and work of 12 towering Catholic and Protestant scholars are sketched in Theologians Of Our Time, a book recently published by the University of Notre Dame Press.

Edited by Leonhard Reinisch, the volume presents profiles of Karl Barth, Rudolf Bultmann, Emil Brunner, Paul Althaus, Paul Tillich, Reinhold Niebuhr, Karl Adam, Romano Guardini, Heinrich Schlier, Hans Urs von Balthasar, Yves Congar and Karl Rahner. It includes a complete bibliography of their books, essays, articles and pamphlets.

FATHER WALSH WRITES EDUCATION VOLUME
Rev. John E. Walsh, C.S.C., vice president for public relations and development at the University of Notre Dame says democracy is “unworkable and even unthinkable” unless it is linked with a strong and free educational system.

Writing in his new book, Education and Political Power (published by The Center for Applied Research in Education, Inc., New York), Father Walsh says education prepares men “to rule themselves and to share and participate in governing.” He observes that people in the new nations of Africa and Asia may not be “educationally ready” for democracy.

COMPUTING SCIENCE COURSE INTRODUCED
An undergraduate course in computing science, using the UNIVAC 1107 computer as an integral part of the

(Continued on page 18)
Coach Parseghian Rekindles a Fire and the Fighting Irish Fight Again

by REX LARDNER

In early January, a team meeting was held in which the coaches were introduced to the squad members and Parseghian's philosophy explained. "Football games are won by teams that are both physically and mentally alert. We will be at our peak for every game we play this year."

Likewise, disciplinary action was taken. Every team member was to abstain from alcohol and cigarettes 12 months of the year. An honor system was then arranged in order to enforce the rules. Workouts began the next day.

By February, a new atmosphere was present — students and faculty members thought the possibility of a winning season might not be a dream. Thoughts became even more optimistic when the first February pep rally was staged at the steps of Sorin Hall.

AN ELECTRIFYING MAN

A dynamic, electrifying man was introduced to the Notre Dame student body for the first time. Parseghian held the mike and 2,500 students in his hand. A forceful, persuasive speaker, the new coach promised a "well-coached, well-conditioned team that would win football games."

When spring practice began, flocks of faithful students observed weekly scrimmages. From an analysis of game films and actual performance in contact work, adjustments were made both offensively and defensively. Still, the Varsity was barely able to beat the Old-Timers in their traditional game, 30-23.

Sports Illustrated commented unfavorably about Notre Dame's football prospects in September. "Ara Parseghian is an impatient, determined man, convinced he can return Notre Dame to its position of dominance in college football, and he undoubtedly will one day—"
but not in 1964. This year he will hope for the best, which could be a break-even season.” Yet, the following months illustrate one of the greatest comebacks in football history.

Parseghian came to Notre Dame where recent football teams had a losing tradition. The basic problem was one of morale, teaching beaten players they could win. Notre Dame failed to produce winning teams since 1958, and her image had suffered. With 16 lettermen back, Parseghian hoped to start producing, “consistently winning seasons.”

The 1964 Fighting Irish were a self-confident group, exemplifying pride and enthusiasm in everything they did. More unity and teamwork was shown in this year’s squad than in the past three seasons combined.

One of Parseghian’s achievements was the development of John Huarte. In September it was thought that Huarte would be lucky if he received a monogram this year. As it turned out, he got the Heisman Trophy. Parseghian instilled confidence and desire into his non-lettermen passer, and Huarte responded superbly: he completed 114 of 205 passes for 2,062 yards and 16 touchdowns. He also directed the team flawlessly, faked expertly, and besides the Heisman award, made several All-America teams.

The Jack Snow Story also has a Parseghian copyright. Snow was switched from halfback to split-end where he could make use of his speed, size, and moves. As a result the All-America end broke almost every pass-catching record in Notre Dame history, though his 70 career catches fell one short of the all-time record, held by Joe Heap.

Captain and linebacker Jim Carroll, Notre Dame’s third All-American, played offensive and defensive guard as a sophomore and junior. By an analysis of game films and Carroll’s overall performance in spring practice, the Irish captain became a center linebacker. The switch proved to be worth it. Carroll led the defensive squad deftly, developed into one of the finest linebackers in the country, and averaged over 14 tackles a game.

TWO STRONG UNITS

By forming a separate offense and defense, Parseghian came up with two strong units, one always ready to play. The two-platoon system fit right into his plans.

Lack of depth at certain key positions hurt the Irish
somewhat during the course of the season. The loss of Jim Lynch at left corner linebacker was a definite weakness in the Pitt game. A shoulder injury to Alan Page midway through the Southern Cal game considerably hampered the Notre Dame defense. But overall team speed, which Parseghian said was poor at the start of 1964, was more than adequate.

On offensive, Coaches Doc Urich and Tom Pagna helped develop a potent attack. In Phil Sheridan, the Irish had an excellent tight end; someone big who could block effectively yet be a threat as a pass receiver.

Interior linemen John Meyer, Jim Snowden, Bob Meeker, and Norm Nicola gave the Irish excellent inside blocking. Guards Dick Airington and John Atamian blocked superlatively downfield as well as on end sweeps.

In the backfield, Eddy and Wolski gave the Irish a potent inside-outside running attack. The two combined for over 1,000 yards rushing. Fullback Joe Farrell had his best year, and Joe Kanior was an adequate replacement in the Southern Cal game.

The forward wall of John Ray’s defense was composed of four sophomore linemen—Alan Page, Kevin Hardy, Tom Regner, and Don Gmitter. Though inexperienced, the four played like veterans, accounting for over 200 tackles. Seniors Carroll, Tom Kostelnik and Ken Maglicic handled the linebacking chores expertly. Converted end Jim Lynch was outstanding as a sophomore, and Arunas Vasys, who replaced Lynch late in the season, filled in well.

A unit of its own Paul Shoults’ defensive secondary accounted for 13 interceptions. Unheralded star Nick Rassas, besides leading the team in punt returns, was one of the surest tacklers on the team. Tom Longo played the left cornerback position well, and Tony Carey developed into one of the finest pass-coverage artists in the nation. Carey himself finished the season with eight interceptions.

Besides the dynamic, forceful influence of Parseghian, the work of his assistants, and the performance of the team themselves, success in 1964 was also a result of the psychological build-up for each game.

Stars on the helmets of those defensive players that intercepted passes was an idea uniquely Parseghian’s. Signs on lockers and bulletin boards helped prepare the team mentally for each game. Even Parseghian’s own participation in practice sessions livened spirits and strengthened the unity of the team.

The “Buzzer System” was an added incentive during practice drills. Daily workouts were planned so that a player did not have an idle moment. New drills such as the “50-second count” were also instituted by Parseghian.

There were also symbols of the 1964 season—various “Hate State” and other buttons, pre-midnight pep rallies on the main quad, and articles concerning the resurgence of Notre Dame football in national magazines. During the season, Life, Sports Illustrated, Newsweek, Time, and The Saturday Evening Post ran features on the “New Era of Irish Football.”

NATIONAL PROMINENCE RESTORED

All of these ingredients were a part of Notre Dame football this fall. But what was most important was the team’s actual performance—a 9-1 record and a national rating.

For the quality of ND football, Duffy Daugherty can speak truthfully: “If there is a better team in the world, I’d sure hate to play them.” Ara Parseghian—the miracle worker—has restored Notre Dame football to national prominence.

THEOLOGY DEPARTMENT SPONSORS TWO SYMPOSIA

Notre Dame’s theology department sponsored two symposia during the Fall semester, the first on biblical theology and the second entitled, “Christ and Conscience Today.”


In the picture at the right, below, Father Schlitzer talks with Rev. Richard McCormick, S.J., Bellarmine School of Theology, North Aurora, Ill.; Dr. Louis Duprem, associate professor of philosophy at Georgetown University, Rev. John Romanides, professor of theology at Holy Cross Orthodox Seminary, Brookline, Mass., Dr. Mary Calderone, executive director of the Sex Information and Education Council of the USA and Dr. Paul Heyne, professor of philosophy at Valparaiso University. Another speaker, not pictured was Dr. John C. Bennett, president of Union Theological Seminary, New York City.
an opportunity
for service...

by Peter Collins and Cary Shaffer

The Council for the International Lay Apostolate (CILA) was born on the Notre Dame campus in the spring semester of 1961. It is a student organization concerned with the role of Catholic university students in today’s world. It wants to help its members understand some of the complexities of this world, some of their responsibilities, and some of their opportunities. It stands on the principles of two great encyclicals of Pope John XXIII: Mater et Magistra, and Pacem in Terris. CILA believes it can contribute to this end by a program of education, personal formation, and service. Some of its service projects are on the campus, some in South Bend, others in summer work in the United States, in Mexico and in Peru. This article concerns itself with CILA’s Peru and Mexico projects of this last summer.

Seventeen Volunteers to Mexico

CILA sent seventeen students to Mexico and all of us lived in the same town, Tacambaro, and worked on the same project. Tacambaro is a rural town west of Mexico City in the mountains, more than a mile high. It has ten thousand people of all classes. We lived and ate most of our meals with Mexican middle-class families during the eight weeks that we were there. At Tacambaro, the project was coordinated by a young Mexican priest, who earlier had selected the families for whom we were to build houses.

When we arrived in town, we were amazed by the friendliness of all the townspeople. We couldn’t even pass someone on the street without saying “Buenos días” to them. If we didn’t they would just repeat it until we did. With our problems of communication, people were very understanding, and this huge reserve of courtesy and friendliness never failed to touch us deeply.

We worked in a slum area in the town. The town rests on a shelf on the slope of a small mountain, and the slum was far down the slope. We planned and built three duplexes, dividing ourselves into small teams, all working within a hundred yards of each other. The houses were built on small lots that were steeply pitched. Often at the foot of these small lots was the refuse and dung of several years’ accumulation, a breeding place for disease. In most instances, miserable tar paper shacks had to be torn down. To these people who possessed so
little, even the walls to these shacks were saved for later use. In fact, an old lady who sold mangos built her shack out of the empty lime and cement sacks that remained after each day of work.

There was no such thing as a typical workday for us. However, each day we started work at about nine o'clock, and knocked off for dinner at one-thirty. After dinner we worked from three until dusk, and there were times when the last of the mortar was virtually used by moonlight. We made stone foundations, and constructed the floors of concrete. The walls were of cinder block, made from the coarse volcanic sand of the area. The roof was a wooden beam and tar paper combination. We also put in a basin, a shower and toilet; and also provided a septic tank, running water and electricity.

But we had no typical day. When the people of the slum found out that one of the students was a pre-med major, he soon spent many of his afternoons looking after their ailments. Another day, an old woman wanted a bit of cement, which she didn't even know the word for, to put over the steep path to her hut. It is indeed difficult to say such sad words, "We can't," to such suffering people.

We were, however, constantly exposed to the extremes
of Mexico during our stay of eight weeks. On many weekends we went travelling, visiting other places off the beaten track. We went to a small village in which the people for the most part couldn’t speak Spanish, and who had never seen electric lights. We also went to small provincial cities. We were impressed by the work of the government; the modern buses and new semis on the highways, and diesel trains. Mexico, we thought, is a country conscious of its progress. The extremes of wealth were best illustrated to me by the fact that the family I stayed with bought a new 1964 Chevrolet, worth $6,000 in Mexico, while one of the families for whom we built a house was subsisting on next to nothing so that they could save $14 for a school uniform for their daughter.

There was the day when we took the picture of our new homeowners — the father, mother, and a baby girl 14 months old. They got into their Sunday best for this picture, and yet how different was their world and the rich, easy one that we live in the United States! They, unlike us, would never escape the tar paper shacks that formed the background to their picture.

When we left the new homeowners, they had only 5 pesos, or forty cents, and enough corn flour to last them until Monday, when the father could work in the fields. He made eighty cents a day. Such a grinding poverty is inconceivable until it is seen. Why was his daily life not our daily life? What inscrutable plan of God made us students, living in a wealthy country, not poor hired hands with lives of many heavy crosses? Is it not perhaps that our lives of many talents cannot remain jealously kept, but must be shared with others? We only hope that we were able to return a small part of all that was given us in Mexico this summer.
The main job Tom Boriers and I had was to help with the building of houses in a *barriada*. This was Padre Jose's 'self-help' program, involving the parish co-ops and the credit union. We worked on seven houses, along with the Peace Corps. The people worked on the railroad all day, came home and worked on the houses in the evening. Sunday was a busy day: about twenty-five men would join to roof the three-room houses. It took a lot of manpower; a lot of concrete had to be mixed. Everyone worked hard, and working with the people was a wonderful way for Tom and me to get to know them. We made many good friends... and felt very much a part of the community.

Frank Quinlivan and Dan Scott worked in Puon, 13,000 feet up in the Andes. Frank writes of his impressions of Lima: "The contrasts of Peru struck me from the night we landed at Lima International Airport. The land looked cold and desolate; it was dust. The slums swept past and out of the night a picture of the Sacred Heart flashed in and out of view. I felt lonely and a little afraid, but oddly I felt close to home. There are the contrasts of the capital city: the slums of Fray Martin, the great market, full of crowds and noises and strange smells. There was fish and meat and fruit, children playing, swarms of flies, the sounds and smells of Poverty. And there was dinner in the Crillon Hotel's Sky Room, high above the city's lights, where violins played to us as we looked out over the city, with neon lights flashing below us."

I worked in a small, poorly equipped state hospital in the altiplano town of Sicuani. Sometimes I was given a ward to take care of, other times I "circulated," helping out where I could. The older patients were amazingly stoic and enduring, reconciled to their most often inescapable situation and incurable condition. The children in the hospital made the place happy. Dominga and Aurelio, Casiano and Carmencita, each full of fun.

Sophomore Jim Lynch, linebacker on this year's football team, tells about his orphan friends at Sicuani's hospital. "Not many kids in Sicuani ever get spoiled. They have to work too hard, and even very young ones have jobs to do. One exception was Aurelio... He had just been dropped off one day at the hospital. Dominga had been there with big stripes on her back from beatings, and huge sores on her body from tuberculosis. She is a pretty girl, always happy."

Why did we go? What were we trying to do? The idea of an exchange, a dialogue, was a dominant reason. Of course the lure of travel and adventure was present also, but at the bottom was the understanding that our group came to Peru not as tourists, but to give ourselves and to be open to receive. We tried our best to exemplify the fundamental truths of the Christian life, as lived by young Catholic college students: ideas, ideals, convictions, practice. In turn, we found that the Latin Americans had much to teach us.

When we left Peru in August, we hoped for two things. First, to be able to bring home what we had learned and begun to understand, in order to share this with others in our homes and communities, and on the Notre Dame campus. We believe our own lives have been deepened and enriched, and that we should be better Catholics, better neighbors, and better men. Second, we hope that some of those we met and lived with in Peru will be similarly affected, and will know that the "gringo" cares about them. Whatever small material assistance we could give, we hope will be not only of some practical value, but also a sign and pledge that our efforts and interest will continue in future years. A common note runs through each of our reports: the discovery of friendship in a new country and in the middle of a strange culture, and the strong conviction that when the summer's work was over, we were the ones who were the most benefitted. For all members of this third Peru project, as for those who took part the first two years, the story is not ended. There are mountains still to climb.
The Notre Dam Memorial Library...
center for study at a Great University
The idea that a federal income tax credit should be granted to those who pay tuitions and fees in both tax-supported and nontax-supported institutions of higher education has recently been widely discussed and earnestly advanced. The idea has had the backing of leading citizens, educators, and legislators but it has also encountered prominent and powerful opposition. It has been embodied in various legislative proposals, one of which, the Ribicoff Amendment (Amendment 329 to HR 8363), failed to pass in the United States Senate by only three votes. The future of American higher education might very well depend on whether the tuition tax credit plan is accepted or rejected.

To be understood properly, the tuition tax credit proposal must be considered in the full light of what it is and what it seeks to accomplish. Further, there is an important distinction between the theory of the tax credit plan and its diverse practical formulations. In its simplest outlines, the tuition tax credit plan is one attempt to meet the problem of financing American higher education and of fostering and extending the American system in which both public and private colleges and universities contribute to the nation's prosperity and progress. In an era of rapidly rising costs and rapidly increasing enrollments, how can we best make sure that the quality of American higher education — both public and private — remains high and continues to improve? There is widespread agreement that higher education, as one of America's greatest assets and achievements, must be made stronger and more widely available.

In general, public higher education in this country has always been regarded as a responsibility of the local or state governments. It has been, by careful design, financed through local and state taxation. Private higher education, on the other hand, has been financed through a combination of tuitions, private philanthropy, and contributed services.

Though the principle of local and state autonomy in higher education has remained sacrosanct, the federal government has shown in itself in many ways a friend and ally of higher education. The G.I. Bill, the National Science Foundation, the National Defense Education Act, and the many different kinds of research sponsored by one or the other of the federal agencies at American colleges and universities, are examples of the ways in which the federal government has aided higher education. However, these actions or measures and others have raised basic questions about the way in which federal assistance to higher education determines the directions and emphases in higher education. They also raise fundamental policy questions about the fact that certain federal programs assist some colleges and universities and not others. Especially, they raise questions about how directly involved the federal government should become in higher education.

The tuition tax credit plan is basically a form of federal assistance to American higher education. It calls for a clear recognition of the fact that the federal government is rightfully vitally interested in the quality and quantity of higher education. But the tuition tax credit plan seeks to avoid or ameliorate the problem of federal control of higher education. It seeks to guarantee that all colleges and universities share to a greater or lesser degree — or better each in its own way — in the benefits of federal assistance through a system of tax relief. The tax credit plan, in short and in essence, grants a federal income tax credit or exemption to those who make an important and lasting contribution to the nation's welfare through paying the tuitions and fees demanded by higher education.

All those who pay tuitions and fees in higher education would be eligible for a federal income tax credit, whether these tuitions and fees are paid at public or private institutions. The program is aimed both at helping colleges and universities meet the soaring costs of first-quality higher education and at making it possible for parents, guardians, and friends, to cope with the necessarily increasing tuition rates in both public and private colleges and universities. The frequently, but unfortunately, made assumption that public colleges and universities do not charge tuitions never was entirely true and will be much less true in the future.

It will be helpful in seeing the need for a tuition tax credit plan to cite a particular example, in this case the University of Notre Dame. Ten years ago the tuition alone at Notre Dame was $375 a semester. The tuition for the school year 1964-65 is $700 a semester. In other words, tuition at Notre Dame has gone up on an average more than $30 per semester for the last ten years. Although tuition covers only between one-half and two-
Notre Dame, it is almost inevitable, if Notre Dame is to remain competitive and to advance and if costs continue to mount, that tuitions will have to go up still further. There is, in fact, no reason to think tuition will not go up as much in the next ten years as it has in the last ten years. Comparatively speaking, most private and most public colleges and universities find themselves in the same situation in which Notre Dame finds itself.

During this same ten-year period, of course, family income has shown a dramatic rise. It is true that many families can afford more for higher education now than they could have ten years ago. But family income has not, by any means, kept pace with increased educational costs. The demands for new and expensive facilities to meet increased enrollments, i.e., libraries, laboratories, classroom buildings, new curriculums — all aimed at improving the quality of education — have forced educational costs to exceed far the relative gains in family incomes.

The University of Notre Dame merely illustrates the point. The same skyrocketing of costs prevails generally throughout higher education. The simple fact is that parents are falling further and further behind, and will continue to do so, in their ability to pay the tuitions required by higher education as it seeks to maintain quality and to expand enrollment. The tax credit plan would enable parents, especially at the middle-income level, better to meet these rising costs.

The tuition tax credit plan is as simple as it is realistic. On his presenting proof that he had, in fact, paid tuitions or fees in higher education, the taxpayer would be allowed a certain prorated percentage of these tuitions and fees as a tax credit. This would be an actual tax credit rather than a tax deduction. After determining the amount of his federal income tax, the taxpayer would subtract the tuition tax credit to which he is entitled from his total tax bill. For example, the taxpayer who had a tax bill of $1,000 and was entitled to a $300 tuition tax credit would pay $700 in federal income tax.

But in addition to assisting parents to meet higher education’s rising costs and helping to make it possible for them to send their college-age boys and girls to colleges of their own choice, the tuition tax credit plan has many other distinct advantages. Principally, it would enable colleges and universities to raise their tuitions, in keeping with their needs and the needs of this nation, without the fear of pricing themselves beyond the ability of parents to pay. Secondly, while the federal government would be directly assisting American higher education, there would be no danger of its controlling it. Thirdly, although many private colleges and universities are church-related, it does not appear that a tuition tax credit plan would violate in any way the constitutional doctrine of separation of church and state. Fourthly, the full value of each tax credit dollar would flow directly and immediately to higher education. Fifthly, the program would be comparatively easy to administer and the federal government would become a genuine partner in American higher education in that it would give all colleges and universities an equal chance to share in this form of federal support.

There are difficulties, to be sure, with the tuition tax credit plan. Some of its opponents, both individuals and official groups, are opposed in principle to any form of federal assistance and they feel that higher education must work out its own financial problems on a local, state, or private basis. Others maintain that the plan would mean too heavy a loss of revenue to the federal government. Some hold there are other, and more effective, forms of federal assistance to higher education; they think the tuition tax credit plan already proposed would not, in reality, produce sufficient funds for the needs of American higher education. Others say the tuition tax credit plan would open the floodgates to all other special-interest groups who even now are also seeking tax credit. And still others hold that such a plan would not help those who most need help, namely the sons and daughters of nontaxpaying parents.

However, the proponents of the tuition tax credit plan feel they can forcibly counter these arguments and all others. They point out, for example, that the tuition tax credit plan is not designed for nontaxpaying parents. Other plans and programs might be or must be set up to give assistance to the sons and daughters of those who do not pay taxes. And, in fact, the tuition tax credit plan would, in itself, activate the setting up of various forms of scholarships since the tax credit would not be limited to one’s own children or dependents.

Whatever the advantages of the tuition tax credit plan may be in theory, the practical problem of how much of a tax credit should be allowed remains a perplexing one. How can a plan be worked out that will be fair to all? Several different answers have been advanced and they range all the way from a complete tax credit for tuitions and fees to a credit of a relatively modest percentage, based on income tax levels. Here again, those who favor the tuition tax credit plan feel that a reasonable compromise could be worked out with the help of the government’s fiscal experts.

The tuition tax credit plan, in one form or another, is sure to be weighed from every point of view in the months and years ahead. It is of vital importance that all citizens be as fully informed as possible about its merits and its possible disadvantages as they strive to reach a decision. For further information write to: Citizens National Committee for Higher Education, Inc., P.O. Box 1146, South Bend, Indiana.

ND at National Electronics Conference

Three Notre Dame faculty members from the Electrical Engineering Department man a display booth at the recent National Electronics Conference in Chicago. They are, (l. to r.) Arthur J. Quigley, James L. Massay, Basil R. Myers and Philip Ryan, a graduate student.
There are two types of investigators: one devotes his energies to the recombination of known facts, by which he publishes frequently on material of questionable basic value. The other engages in revolutionary developments of which the majority are failures; however, the successes are significant. I refer to the latter type of investigator in this presentation.

The traditional ivory tower of the academic community now has windows and doors through which its insular character has been altered. Students and the community now have mutual interests in science; but we wonder if either has been clearly benefited. I have mixed emotions on the employment of academic scientists as consultants; it is comforting to have the money and the implied recognition, but it may interfere with programs requiring intense concentration in a research program. Increasing numbers of scientists have assumed the role of consultant, part time or full time, for prestige or for service. Since it involves money, the motivation has financial or political implications. We live in a materialistic society, and scientists find that indifference to its pressures is unrealistic.

ASSUMES PRACTITIONER'S ROLE

When an academician becomes a consultant he assumes the role of a practitioner, and his responsibilities are more and more that of satisfying the needs of his clients. I don’t imply an immoral or distasteful connotation to such a situation; but the transition requires a change in basic philosophy. The practitioner in science represents applied and practical interests. He is often the antithesis of the theoretician and the experimentalist. He translates and implements basic science for those who require solution of pressing problems. Such activities may thus lead him away from his basic responsibilities, and he may even become an administrator.

I regret that scientists are being weaned from academic pursuits to the practical aspects of consultation, temporary or otherwise. As a result of this transition in purpose some become politicians — manipulating people rather than facts. Some cover mediocrity in the cloak of respectable university appointment, and use both for personal benefit.

One does not hire a consultant without a present or impending problem. He may represent a precise scientific capability, a source of psychological stabilization (a tranquilizing effect), or a form of respectability through association. (Consultants maneuver into employment, too.) Some organizations have a sincere desire for elevation of scientific standards and practices and seek outside aid to attain such a commendable goal.

I am opposed to the use of scientists as long-time consultants, when they are intensely involved in programs of fundamental nature, and when students who depend on them are deprived of their supervision and guidance. Outside employment diverts and dilutes their energies, and they become preoccupied with activities far removed from their primary interests and needs. Scientists who seek consultation assignments should recognize the hazards in flitting from job to job; they become so involved in organizational problems that they drift away from the very activity which qualified them for such work. Eventually they show political inclinations, and practice an empirical form of science. Such a consultant finds himself in the position of an entrepreneur, a middle man, who neither creates nor executes the programs for which he is employed. Further, a consultant may have to enter into a pact of confidence which tends to restrict his intellectual freedom.

EXTRACURRICULAR ACTIVITIES COUNT

The universities should assume the responsibilities for the social and financial satisfactions of its staff, instead of subsidizing and encouraging outside activities for financial relief. Too often, university administrators assess the value of a faculty member by the extent of his extracurricular activities; and if he becomes burdened with assignments to impressive-sounding committees, whose major contributions are frustration and confusion, this too is considered important to the university.

The employer should recognize that the consultant is not a substitute for a permanent staff, merely an adjunct for a special need. He may abuse the privileges of con-
sultation in using him for purposes of improving public relations or public image, urging representation to agencies for special favor, pressing for a decision or opinion which the employer finds unpolitic. I doubt that most administrators, and scientists, know what is wanted in a consultant; further, what should be the attributes of a consultant. Certainly they cannot be equated with specific university background, physique or mannerisms. Who decides on the qualifications of a consultant and on what basis is he selected?

OBJECTIVITY IS LOST

Although I here express an unrealistic viewpoint, no man should be employed as a consultant who needs the income, otherwise he loses his most valuable attribute, objectivity. His term of employment should not extend beyond the completion of the problem. If he has plenty of time for consultations then he is not much of a scientist. If he merely provides respectable “window dressing” to an organization, and if he deprives himself of vital work time, then he is deceiving himself and his employer. Since the employer does not provide the scientist with working facilities, continuity of support, and retirement benefits, remuneration should be high, thereby prohibiting also the careless employment of a man for an indefinite need.

A disturbing development in science is the appearance of a new breed of research administrator who has had no experience in research. His basic interest is acquiring and accounting for large budgets; and surrounding himself with buffer personnel, regulations, and committees so that he neither receives nor considers the problems which are the concern of the scientist. This is related to the use of consultants whose main contact is with the isolated administrators, and whose advice may be considerably distorted before it reaches the individuals who would most benefit from it. I offer as an extreme example the appointment of a physician-administrator for a large medical center in this country. He was in charge of hospital, of teaching, and of research activities. He never cared for patients, he never taught a course, and he never engaged in a research program. He maintained a balanced budget in a sterile institution. He did not know how to recognize the need for a consultant, nor use one correctly after he arrived.

INCREASING NEED FOR CONSULTANTS

The trend to ultraspecialization in science has and will require increasing need for consultants. Scientists do have an inclination for service, but this should be in moderation. They are in a way a privileged group — endowed with a specialized intellectual capacity which cannot be manufactured; and yet not necessarily brilliant in other matters. Employers do not benefit science by prostituting its servants, but they can help science and the scientist by utilizing his services only to the extent of his interest in the problem. With our complex economy, the employer may someday find himself employed as a consultant, and an appreciation of each will yield benefits to all concerned.

What help do research administrators expect from a university? In discussions held earlier, a fallacy was exposed. Universities should educate, not train. Professional schools train and if their graduates were not educated at an earlier time, then they emerge as technicians. Most scientists in this country are trained. A man who stops seeking knowledge, loses it.

The picture I portray is an extreme one and not an attractive one. I have offered little in the form of a solution to the dilemmas of consultative practices. If present trends continue, perhaps the scientific community would be better off if all such exsanguinating influences were prohibited.
NOTRE DAME participates in AFGHANISTAN AID PROGRAM

by Dean Norman R. Gay
College of Engineering

In September 1963, eleven American universities and institutes of technology, and Educational Services Incorporated (ESI) formed a Consortium to assist the Royal Government of Afghanistan in the development of engineering education at Kabul University. Financial support is provided under Contract between the United States Agency for International Development (USAID) and ESI — which administers the Kabul Afghan-American Program — and Supplementary Agreements between ESI and the other members of the Consortium. The University of Notre Dame is one of the Consortium members along with Carnegie Institute of Technology, Georgia Institute of Technology, Illinois Institute of Technology, Lehigh University, North Carolina State of the University of North Carolina at Raleigh, Purdue University, Rice University, Stevens Institute of Technology, the University of Cincinnati and Washington University.

Afghanistan is a land of rugged beauty and sharp contrasts, of desert wastes and lush green valleys, a remote mountainous area of 246,000 square miles (about the size of Texas) that stretches across the towering heights of Central Asia. It is bounded on the north by Soviet Russia, on the east and south by Pakistan, on the west by Iran, and with the extreme northeastern corner touching Chinese Sinkiang. The country is dominated topographically by the lofty snow-capped ranges of the Hindu Kush, an extension of the Himalayas. Mountainous terrain limits access to Kabul, except through several passes. East of Kabul, on the much-used road to Peshawar, Pakistan, some 185 miles distant, one drives through the scenic Kabul River Gorge, then to Sarobi and Jalalabad and eventually over the famed Khyber Pass.

Kabul, the capital city, with a population estimated at 400,000, is a busy thriving metropolis and in elevation and climate is quite similar to Boulder, Colorado. As the seat of government, a constitutional monarchy, Kabul has several imposing buildings which include Parliament House, the King’s Palace, various Ministry buildings and the national University.

Kabul University is the country’s only center of higher learning. Several European countries such as France and Germany were instrumental in aiding the University to set up facilities and programs in law, medicine and the sciences. Soviet Russia has been pouring aid into the country in the form of roads, dams, industrial plants and military assistance and more recently has provided the funds for setting up a Polytechnical Institute. The United States has actively engaged in a direct education assistance effort in agriculture and now more recently in Engineering.

When A.I.D. requested E.S.I. to implement a program of Engineering educational assistance, the Carnegie Institute of Technology and the University of Notre Dame agreed upon the choice of a Program Director who is Dr. O. P. Bergelin, formerly a professor of Chemical Engineering at Texas A. and M. who had previously spent a number of years in Pakistan. Representatives of
The Consortium institutions met for the first time on February 28, 1963 to discuss the situation and at that meeting Dr. Norman R. Gay, Dean of the College of Engineering at the University of Notre Dame was elected Chairman of the Steering Committee for the Kabul Afghan-American Program.

At the meeting it was agreed that there existed at Kabul University a need and an opportunity for United States universities to participate in a development in engineering education which would be significant in terms of the national interests of the United States. The Universities agreed that their role would require several functions in providing the technical and educational resources necessary for execution of the project, as follows: 1) to provide the services of about ten U.S. professors per year over a period of from five to ten years at Kabul and to provide for Afghan participant training in the U.S. for selected students and faculty members; 2) to encourage faculty participation in the project, to look for individuals whose professional competence is complemented by outstanding personal qualifications for service on the project, and to treat this participation as regular faculty service with respect to promotion, salary increases, etc.; 3) to undertake to make arrangements for Kabul faculty to obtain “on the job” teacher training; 4) to participate in meetings and symposia that may be held from time to time in the United States in connection with the project and 5) to agree to advise about equipment, teaching methods, library acquisitions, and related educational matters for Kabul.

The academic year in Afghanistan runs from April to December with the three months’ vacation being the winter months of January, February and March instead of the summer months as they occur in the United States. Lack of central heating in the buildings makes such an arrangement necessary although the new Engineering building on the Kabul University campus, built with U.S. and counterpart funds, has its own central heating system and the United States Engineering faculty members use the winter months to install laboratory equipment, hold seminars for the Afghan teachers and are planning a pre-engineering program for high school applicants during this period. At the present time, there are eight U.S. faculty members in Kabul including Professor C. Robert Egly of the Mechanical Engineering Department of the University of Notre Dame who went to Afghanistan in September 1963 and is due to return about December of
MAK E TEN-DAY VISIT

In April 1964, Mr. Gilbert Oakley, vice-president and managing director of E.S.I. and Dr. Norman R. Gay, of the University of Notre Dame, made a ten-day visit to Afghanistan and met with members of the American and Afghan faculties in the College of Engineering, with the Chancellor of Kabul University, with the Minister of Education and other Afghan officials, and with the United States Ambassador, and the Director of the AID Mission. During this visit, the progress of the Faculty of Engineering was reviewed and, with the assistance of the field staff, a six-year projection for the program was made.

At the present time, there are 267 students enrolled in the Faculty of Engineering, divided about equally between students in the Civil Engineering and Electro-Mechanical Engineering options. Instruction and textbooks are in English in Engineering but in other Faculties of the University, instruction may be in French or German or the native language which is Farsi or Pashto (closely related to Persian). Since Afghan students normally study only one foreign language in primary and secondary schools, students for the Engineering Faculty must have studied English and, in addition, instruction by the Engineering faculty must include mathematics and the basic physical sciences. Graduates of the program, at least for the present, go principally to the various government ministries such as those of Public Works and Mines and Industry. A new single-story engineering building was completed last winter on the University campus and equipment for the various laboratories has been arriving steadily. The equipment arrives from the United States by both sea and air shipments.

A TYPICAL STAFF HOUSE

The typical house in Kabul occupied by the American staff is located within a compound enclosed by high brick walls. Most compounds have a spacious yard, with shade and fruit trees. It is possible to buy many essential foods from the bazaars although there is also a commissary operated by the American Embassy. Household servants are commonly used and are paid the Afghan equivalent of $15 to $35 per month depending on the type of services rendered. There are International schools in Kabul at the primary and secondary levels in which the instruction is excellent. Church services for Catholics are held in the Italian Embassy.
BRADLEY ATTENDS MEETING

Francis X. Bradley, Jr., research administrator at the University attended a conference on “Research Administration in Colleges and Universities” in Washington, D.C., in October.

FATHER O’BRIEN WRITES “DIGEST” ARTICLE

The improved relations between Protestants and Catholics in recent years are “profound” and “without precedent in almost 2,000 years of Christianity,” according to Rev. John A. O’Brien, research professor of theology at the University of Notre Dame.

Father O’Brien documents the “far-reaching and even revolutionary” change in attitude in an article, “New Warmth Between Protestants and Catholics,” in the October issue of Reader’s Digest. He suggests that the ecumenical spirit “spills over to the relations of Christians with Jews.”

“Suspicion, antagonism and hostility are changing to understanding, good will and brotherhood,” Father O’Brien writes. He attributes the rapprochement largely to “the immensely warm personality of Pope John XXIII” and to the Ecumenical Council, still in session, which he convened.

ELECTRICAL ENGINEERS IN TOKYO

Two members of the University’s electrical engineering faculty participated in the International Conference on Microwaves, Circuit Theory and Information Theory in Tokyo in September.

Prof. Basil R. Myers, head of Notre Dame’s electrical engineering department, presided at a conference session on “Active Networks” and delivered papers on “Analysis of Flow in Weighted, Directed Graphs” and “Ladder Realization of Biquadratic Driving-Point Functions.” Dr. Ruey-wen Liu, associate professor of electrical engineering, was chairman of a conference session on “Time-Varying Systems” and presented a paper on “The Self-Sustained and the Forced Oscillations of Time-Invariant Nonlinear Networks at Large.”

BURTON GIVES NORTH CAROLINA SEMINARS

Dr. Milton Burton, director of the Radiation Laboratory and professor of chemistry at Notre Dame, conducted a series of seminars in October at colleges in North Carolina under the visiting-scholar program of the Piedmont University Center.

Dr. Burton gave six lectures on “Experimental Studies of Ultra-Fast Reactions” and “Elementary Processes in Radiation Chemistry.”

NICOLAIDES GIVES SPACE LECTURE

Dr. John D. Nicolaides, head of the newly designated department of aerospace engineering at the University of Notre Dame, recently lectured on “A Review of the Space Program.” The lecture was sponsored by the Notre Dame chapter of Sigma Xi.

Prior to coming to Notre Dame in September, Dr. Nicolaides was a special assistant to the associate administrator for Space Sciences and Applications of the National Aeronautics and Space Administration (NASA) in Washington, D.C. He also served as technical director for the Navy Astronautics Program in the Bureau of Naval Weapons. At Notre Dame, Dr. Nicolaides is teaching courses in missile flight and astro-dynamics.

EASTMAN KODAK GIVES $2,400

Notre Dame has received an unrestricted direct grant of $2,400 from Eastman Kodak under the company’s aid-to-education program for 1964.

Notre Dame is one of 62 privately supported colleges and universities to receive direct grants from the company this year.

CARDINAL O’HARA LECTURES BEGIN

The Notre Dame College of Business Administration inaugurated its 1964-65 Cardinal O’Hara Memorial Lectures on October 7 with a symposium on “Poverty in the United States.”

The speakers included Michael Harrington, sociologist and author; Rep. John Brademas of Indiana’s Third Congressional District; and Raymond M. Hilliard, director of the Cook County (Ill.) Department of Public Aid.

CANON GABRIEL PUBLISHES BOOK

Rev. A. L. Gabriel, director of The Mediaeval Institute at the University of Notre Dame, has published a study on Metaphysics in the Curriculum of Studies of the Mediaeval Universities. The book was edited by the Thomas Institute of the University of Cologne, Germany.

Father Gabriel returned to the Notre Dame campus this fall from Harvard University, where he had served as the Charles Chauncey Stillman Guest Professor of Roman Catholic Studies for the 1963-64 academic year.

TWEEDELL PRESENTS PAPER

Dr. Kenyon S. Tweedell, associate professor of biology at Notre Dame, presented a paper at a conference sponsored by the New York Academy of Sciences at the Waldorf Astoria Hotel in September.

Dr. Tweedell discussed “The Cytopathology of a Frog Renal Adenocarcinoma Studied in Vivo with Fluorescence Microscopy” at a session on viral diseases of amphibia. The research for this study was supported by a grant from the Allen County (Ind.) Cancer Society of Fort Wayne.

UNIVERSITY JOINS SCHOLARSHIP PROGRAM

The University of Notre Dame is one of 30 institutions which will participate in a Latin American Scholarship Program of American Universities. The program is similar to one initiated in 1960 to aid African students.

The institutions, in cooperation with three Colombian universities and the Instituto Colombiano de Especializacion Tecnica en el Exterior of Bogota, will select and support with scholarships an experimental group of Colombian youths for study in the United States beginning in the fall of 1965.

MONTANA HONORED BY ARCHITECTS

Prof. Frank Montana, head of the department of architecture at Notre Dame, was an honored guest at a dinner in New York City in October marking the golden jubilee of the Paris Prize in Architecture.

Prof. Montana in 1936 was the 29th recipient of the Paris Prize which is awarded annually in a nationwide competition sponsored by the National Institute for Architectural Education. As a Paris Prize fellow, he studied at the Ecole Nationale des Beaux Arts, receiving his architect’s diploma from the French government in 1939.
As another winter engulfs the northern Indiana countryside, the Athletic picture at Notre Dame turns from a wonderful football season to a brand new basketball picture in the antiquated Notre Dame Fieldhouse.

This year, under new head coach Johnny Dee, the Fighting Irish hoopsters face a formidable array of opponents. But with several lettermen returning, the Irish could once again start up the path to greatness in the basketball world.

In other sporting events around the campus in Winter, great numbers of students engage in the following sports: Hockey, Handball, Skiing, Fencing, and Volleyball.

And while the hockey players have to content themselves with unofficial games on the frozen expanse of St. Mary’s Lake when the weather permits, and the handball players sign up days in advance for a chance to use the overcrowded Rockne Memorial Courts, the new Athletic and Convocation Center will feature additional handball courts and an ice-skating arena, the latter to be used not only for intercollegiate hockey matches, but for general recreational ice-skating for all students.

Since Notre Dame began, more than 120 years ago, the spirit of sports and physical development has permeated the University and its men.

The tradition of great teaching — and great learning — is extended in the athletic arena, as well as the classroom at Notre Dame. In order to extend this tradition for all Notre Dame men of the future, the new Athletic and Convocation Center is an integral part of the Challenge II program. It will provide headquarters for all sports, and give students much needed, year-round facilities for every athletic endeavor.

For additional information on this new building as well as the other important portions of Notre Dame’s $20,000,000 Challenge II program please write:

The University of Notre Dame Foundation
P. O. Box 555
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