VISION OF A UNIVERSITY



Final Report of the Case Institute of Technology-Western Reserve University Study Commission

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VISION OF A UNIVERSITY

inal Report of the Case-Western Reserve

University Study Commission

STUDY COMMISSION

CASE INSTITUTE OF TECHNOLOGY-WESTERN RESERVE UNIVERSITY

May 29, 1967

Mr. Clyde Foster and Mr. Elmer Lindseth Chairmen, Boards of Trustees Western Reserve University and Case Institute of Technology

Dear Mr. Foster and Mr. Lindseth,

We enclose the final report of the Study Commission set up by the Boards of Trustees of the Case Institute of Technology and Western Reserve University to study possibilities of closer cooperation between the two institutions looking toward the development of a center of excellence of higher education in Ohio.

In doing so, we wish to acknowledge the support we have received from you and your fellow Trustees, the faculties, and administrations of both institutions, and interested citizens in Cleveland and elsewhere. Particularly, we wish to emphasize that the decision to join the two institutions in a federated University was made possible by the educational statesmanship of President John Millis of Western Reserve University and Presidents Keith Glennan and Robert Morse of Case and of that small group of Trustees of both institutions who comprised the Joint Trustees Committee with which we were privileged to work.

Our final report reviews the history of the Study Commission, recapitulates the reasons why we believe it important to strive for an excellent private center of higher learning in Cleveland and suggests some ways in which the effort to reach that goal may best go forward. It reflects our belief that greatness—a nationally renowned center of educational excellence—can be attained.

Sincerely yours,

HENRY T. HEALD, Chairman CHARLES W. COLE HAROLD L. HAZEN MILTON KATZ DAVID A. SHEPARD

VISION OF A

UNIVERSITY

inal Report of the Case Institute of

Technology-Western Reserve University

Study Commission

Cleveland, Ohio-May, 1967

MEMBERS OF THE CASE-WESTERN RESERVE STUDY COMMISSION

Henry T. Heald, Chairman Charles W. Cole Harold L. Hazen Milton Katz David Shepard

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Lawrence S. Finkelstein, Director
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Mrs. S. Victor Radcliffe, Secretary of the Commission

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ntroduction

This is the final report of the Study Commission which was created by the Boards of Trustees of the Case Institute of Technology and Western Reserve University to study possibilities of closer co-operation between the two institutions, looking toward the development of a center of excellence of higher education in Ohio.

The main recommendation of the Study Commission—that the two institutions join on a basis of equality in a federated University—was set forth in our second interim report, submitted on November 22, 1966. That recommendation was approved by the two Boards of Trustees in January of this year, and we look forward to the formal inauguration of Case Western Reserve University on July 1, 1967.

In this, our final report to the Boards of Trustees, we wish to suggest some ways in which the effort to reach the goal of a nationally renowned center of educational excellence can best go forward.

VISION OF A UNIVERSITY

inal Report of the Case-Western Reserve

University Study Commission

A Guide to the Report

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There follow summaries of the main points in the report, with page references for guidance.

- 1. In planning its future, the University must seek balance between teaching and research; between undergraduate and graduate education; and between nurturing its existing strength in science, engineering, and medicine and developing balancing strength in the humanities and social sciences. To facilitate wise choice and balanced growth, a university planning mechanism is needed. [Pages 22-25.]
- 2. The library system must be strengthened in collections, staff, facilities, and procedures. (Page 11.)
- 3. The challenge to build exemplary quality and innovative programs suggests a strategy of building from existing strengths, emphasizing science, engineering, and medicine not only as fields of inquiry and instruction, but also as forces to be studied and understood as central ingredients in our contemporary civilization. (Page 26.)
- 4. In building from strength, the Medical School is an obvious place to start. There will be opportunities for collaboration between the clinical and the scientific departments, within and

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- without the Medical School. Associations with the social and behavioral sciences hold great promise in the study of medical services and community health. (Pages 27-28.)
- 5. Engineering is another growth point in the University, and federation will provide important opportunities for broadening the range of interaction between engineering and the social sciences. [Pages 28-29.]
- 6. The rapid growth in the sciences in recent years indicates that these disciplines can develop their programs and pursue new combinations of interest, without further significant increases in size. (Pages 29-30.)
- 7. In planning to strengthen programs in the humanities, federation provides a unique opportunity to explore deeply the function of humanities in the modern university. One attractive possibility is establishing, as an option for all undergraduates, the kind of general education program developed at Case in recent years. (Pages 30-34.)
- 8. We believe that the creative and performing arts have a place in the contemporary university and we urge that their role can best be developed here in co-operation with other cultural institutions in Cleveland, particularly with The Cleveland Museum of Art and The Playhouse. (Pages 34-36.)
- 9. We recommend strengthening the social sciences, with priority given to building an economics department and special attention to strengthening anthropology. (Pages 36-38.)
- 10. We advocate taking advantage of Case's strength in computer science and service to provide necessary understanding of these instruments of learning for all students and faculty in the University who may derive benefit from it. (Pages 39-40.)
- 11. We welcome the movement toward a combination of the Western Reserve Graduate School of Business with the Case Division of Organizational Sciences and foresee a range of fruitful outcomes of that development. (Pages 40-42.)
- 12. We believe that the University will have a great potential for programs in the fields of urban and environmental studies and we suggest one or more study centers to advance and coordinate such programs. (Pages 43-45.)
- 13. We call attention to the need to build in the field of international relations, which is an area of notable weakness at pres-

ent. Whatever route is followed, stronger and broader programs in foreign languages will be needed. (Pages 45-47.)

- 14. We call on the University to lead in seeking new approaches to undergraduate education. (Pages 47-49.)
- 15. We see both a need and an opportunity for Case Western Reserve University to proclaim its commitment to service in coping with the social problems of Cleveland. Particularly we urge that the University, in its own interest, help to arrest the deterioration of its near environment, and, in doing so, seize the opportunity to exert leadership in imaginative programs to deal with social problems of the city. (Pages 49-53.)
- 16. We urge the speedy consolidation of the non-academic functions of the University. [Pages 53-54.]
- 17. Attaining the long-range goal of a faculty on a par in quality with the nation's first-rank major private universities will eventually result in a larger proportion of faculty in higher ranks and a major increase in the budget for faculty salaries. (Pages 54-55.)
- 18. We estimate that upgrading the faculty, meeting operating needs of present programs, improving the libraries, permitting modest growth in programs, and providing for construction needs will require added income of ten to fourteen million dollars per year for the next decade. Increases in endowment will be needed to cover some of these costs and to enlarge the University's base for greater accomplishment. (Pages 56-58.)
- 19. We have been impressed by the degree to which privately controlled universities involve the public interest and the extent to which excellence here will serve this entire region. We, therefore, hope the State of Ohio will adopt the proposals of the Board of Regents for tuition equalization grants to students attending private institutions of higher learning and for assistance in expansion of facilities by such institutions. [Pages 60-61.]

A Guide to the Report

What the Study Commission Did

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On Wednesday, April 12, 1967, the Boards of Trustees of Case Institute of Technology and Western Reserve University approved an "Agreement of Consolidation" and thus completed the first major legal step in the federation of the two institutions. This agreement will be submitted to the members of the two corporations on June 1, 1967, for ratification; on July 1, 1967, the "Agreement of Consolidation" and other necessary legal documents will be filed with the Secretary of State of Ohio and the federation will become effective.

Dr. Robert W. Morse of Case will be the President of the federated university; its Chancellor will be Dr. John S. Millis of Western Reserve. Henry W. Spitzhoff, Vice President for Finance at Case, will become the Treasurer of the new corporation; Philip A. Legge, now Secretary of Case's Board, will serve as Secretary. Thirty-two Trustees of an anticipated total Board of about thirty-nine were also designated at the April meeting.

This was the climax of a series of events that began in the autumn of 1965 when the two Boards of Trustees established a Joint Trustees Committee to study the possibilities of closer cooperation. It was also then decided to create a commission to

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carry out the study "with a view to development of a suitable plan for creation of 'A Center of Excellence' of higher education in Ohio." Mr. Henry T. Heald was invited to conduct the inquiry, which was supported by grants of \$200,000 from the Carnegie Corporation of New York and \$100,000 each from the Cleveland Foundation and the Greater Cleveland Associated Foundation.

A Study Commission was created consisting of Mr. Henry T. Heald as Chairman and Dr. Charles W. Cole, Dean Harold L. Hazen, Professor Milton Katz, and Mr. David A. Shepard.* They soon assembled a small professional staff, consisting of Mr. Lawrence S. Finkelstein, Director, Dr. Arnold H. Berger, Assistant Director, Mrs. Crede Calhoun, Senior Associate, and Mrs. S. Victor Radcliffe, Secretary of the Commission. With the staff's assistance in preparing material for its meetings, the Commission began to examine the academic, administrative, and business functions of the two institutions. In meeting after meeting, as members of the faculty and administration appeared, the Commission encountered excitement and the wish to grow and improve as well as inevitable uncertainty as to what lay ahead if dramatic changes were to occur. Commission members soon agreed that the desire for economy alone was not to be the guiding factor in their deliberations; that they were most impressed by the schools' desire for excellence.

It was recognized that the already existing cooperative arrangements had been advantageous to both Case and Western Reserve. These include: the adoption of a common calendar in 1958; opening up cross-registration for students; the establishment of a joint graduate program in philosophy; the assignment of astronomy to Case and geology to Western Reserve instead of continuing two small neighboring, and competitive, departments; the allocation to Western Reserve of all foreign language instruction; and other cooperative programs, including the research and teaching program in bio-medical engineering.

In August, 1966, the Commission issued its first interim report, testifying to the benefits achieved through cooperation and stating its belief that "progress toward higher standards of academic quality and achievement will be enhanced by extension of the co-

^{*}Brief biographies will be found in the appendix.

What the Study Commission Did

operation that already exists, and indeed depends upon such growth of cooperation." That report led to a resolution jointly adopted by the two Boards of Trustees and released on September 19, 1966, calling on the faculties and officers of both institutions to "make every effort to identify and to implement patterns of teaching, research and organization which were most likely to engender mutual reinforcement" between activities of the two institutions.

With this clear expression of the Trustees' wish for closer relationships between Case and Western Reserve, the Commission turned its attention to the central and most difficult issue involved in further collaboration—the existence of symmetrical departments of chemistry, mathematics, and physics, with parallel aspirations for higher levels of achievement.

It soon became clear that the strategic issue with respect to these three departments was whether the probability of progress toward excellence would be greater if they pursued their separate paths or if they were combined. Simultaneously, Presidents Millis and Morse were grappling with the same issue, which had considerable urgency for them because they faced immediate decisions about the construction of new facilities for the science departments and about the resources necessary for that purpose.

The Presidents concluded that combining the departments was necessary, a conclusion toward which the Commission was also moving. On November 4, 1966, the Presidents announced the decision of the two Boards of Trustees that single departments of chemistry, mathematics, and physics should be created and that the Western Reserve Department of Biology should be made a joint department. They also announced their intention to plan jointly for a science complex involving these four departments, plus the existing departments of astronomy and geology.

This decision was critical. Given the importance and size of the departments involved and the far-reaching reverberations of merging them, it quickly became apparent that a single decision-making apparatus would be necessary to solve the immediate, short-range problems created by the departmental mergers, as well as to plan well for the longer-range development of these disciplines. In the Commission's judgment it was only a matter of

time before a single administrative structure would have to be created.

The pragmatic necessities coincided with the Commission's growing concern for the difficulty of making rapid progress to high levels of academic attainment so much desired by everyone with whom they came in contact. As Commission meetings were held with leaders of many departments and professional schools, it became obvious that in many cases the best hope for program development lay in cooperative planning and pooling of resources. As the Commission deepened its study of the problems and possibilities at both Case and Western Reserve, its members came to feel strongly that the continued separateness of the two institutions was itself an obstacle to realization of some of their hopes. The Commission believed that their chances of success would be much greater with unified leadership giving unified direction, and the coherent purpose and planning that one university could provide.

Consequently, the Commission prepared a second interim report released to the public on December 1, 1966, recommending to the Trustees that they join the two institutions in a federation to be called Case-Western Reserve University.* Federation, a somewhat looser formula than outright merger, had the advantage of making possible both the combination of resources and unity of leadership and the flexibility and autonomy of organization within the University that would preserve the strengths and traditions of the components. Moreover, federation might seem more inviting than merger to other University Circle institutions that might later wish some form of University affiliation.

In early January, 1967, the two governing groups decided to accept the Commission's proposal and to create the new University, thus setting the stage for the April "Agreement of Consolidation."

While helping to formulate and bring about the overall structure of the federation, the Commission also assisted a number of lesser movements toward cooperative and inter-institutional

^{*}The Joint Trustees Committee later decided to omit the hyphen. "Federation" is defined by Webster as "A uniting by league or covenant, especially in forming a sovereign power so that each of the uniting powers retains local powers."

programs. Regardless of what the studies might eventually recommend for the institutions as a whole, it was obvious that there were many areas in which it made little sense for planning to go on in discrete compartments, ignoring the presence of similar problems and plans in a neighboring unit or department.

The libraries of Case and Western Reserve were obviously institutions that would benefit from cooperative planning. The Commission engaged the services of four consultants to make a thorough examination of the two libraries to recommend "what kinds of possible cooperation between the libraries will best serve them in meeting the more exacting requirements of the future" and "to provide the basis for a program to enable the libraries . . . to keep pace with the demands of an academic community that is setting new, more strenuous goals for itself."

The library consultants completed their report, "Plan for a Library," in February, 1967, and it was submitted to the Commission and the two Presidents, as well as (in somewhat condensed form) to faculty members of both schools. The consultants' major recommendation was for the establishment of a unified library system under a single Director of Libraries. The two Presidents agreed to start an immediate search for a highly qualified person to fill this post.

The consultants' report also pointed to opportunities for strengthening library service to the academic community, through stronger collections and by developing improved procedures, expanded facilities, more efficient forms of organization, better staffing practices, and increased use of automation and other technical advances. The report also made suggestions for cooperative arrangements between the library of the University and neighboring libraries, both in University Circle and Cleveland. The library report was well received by the faculty and came at a strategically favorable time, in that it held out promise of an early, tangible benefit from intensified cooperation.

We wish to emphasize the primary importance to the entire University of strengthening the library along the lines recommended by the consultants.

Cooperative possibilities were also the focus of the Commission's informal explorations with other University Circle and Cleveland institutions. The Commission, of course, had no formal

What the Study Commission Did

mandate from the trustees of such organizations as The Playhouse, the Cleveland Institute of Music, the Cleveland Institute of Art, and The Cleveland Museum of Art, but was able to arrange informal meetings with the leaders of these institutions to give them a chance to present their views of closer University ties. From the beginning of the Commission's study, it had repeatedly been said that there were many ways in which new relationships between these institutions and the federated university might be of mutual benefit, particularly because of the need for the University to broaden and deepen its work in humanities and the arts.

As a result of this Commission initiative, the leaders of several of these institutions expressed their desire for a more thoroughgoing study of cooperative possibilities. Committees have since been designated by the University to represent it in these preliminary investigations, and talks are going on at the present time.

It now appears likely that there will be a new, highly significant program in the history and critical appraisal of art established under the auspices of The Cleveland Museum of Art in cooperation with the University. New courses will be added in Fall, 1967, and further enlargement and strengthening of the program is promised for the future.

Negotiations are also under way to bring The Cleveland Playhouse to University Circle. If agreement can be reached, the University population stands to gain convenient access to the productions of the company; and the dramatic arts program in the University may be able to work out training programs in conjunction with the professional staff of The Playhouse.

The Cleveland Institute of Music has also shown an interest in finding ways to establish closer ties with the University. At present, conversations between the University and leaders of the Institute are informal and are concentrated on defining the problems that must be solved before further relationships can develop.

The Commission's belief that urban studies are important in an urban university has found expression in its support of enterprises in this field. Case and Western Reserve appointed urban studies committees during the past year, and the Commission and

staff encouraged these two groups to co-ordinate their efforts. The Commission sponsored trips for faculty members of both institutions to visit distinctive urban studies programs elsewhere; in addition, a Commission-supported conference on the design of an urban studies institute was held in February, attended by twenty representatives of all the interested disciplines and professional schools from both Case and Western Reserve.

Another area where complementary relationships suggested that future growth could best be planned jointly was that of business administration and organizational sciences. The Commission informally endorsed this notion, and its staff helped to stimulate joint talks. Planning is now going forward looking toward a new program of organizational and management science, and the two Presidents are recruiting a new Dean to head up the development of such a program.

The Study Commission also considered the future of the Architecture Department. For some years, the Western Reserve Department has not been among the University's strongest activities; but a combination of architecture with resources at Case in design and materials technology, and with resources in the social sciences in both institutions, suggests the chance for imaginative new programs in the field of environmental design. The Commission has provided for faculty released time to explore program development at both graduate and undergraduate levels in this field.

Finally, the Commission helped to stimulate inquiries into methods for combining the business and administrative services of the two institutions, with priority being given to accounting and data-handling functions. The second interim report specifically emphasized the benefits that the federation could expect from centralizing procedures in this area.

On February 10, 1967, the two Presidents exercised their primary responsibility for planning in the federation by creating a series of planning groups at various levels where change must occur. At the Trustee level, the Joint Trustees Committee will continue to function, responsible for arrangements leading to consolidation on July 1, 1967.

A Faculty Council on Federation was asked to review "the overall educational objectives, faculty organization, and faculty

What the Study Commission Did

procedures . . . in the light of federation" and then to "develop and recommend plans to the administration and faculties on the overall faculty structure of the federated University, on the allocation of its responsibilities and authorities, and on its organization, procedures and by-laws." It is hoped that the Faculty Council will ultimately be useful in bringing the two separate faculties into a single framework under whatever structure is finally adopted.

In the area of academic program planning, an Administrative Council on Federation has been established, with Coordinators representing the Health Sciences, Science and Technology, Social and Behavioral Sciences, Humanities and Fine Arts, Students and Programs, and Business and Supporting Services having seats on this council. The Administrative Council has been asked to advise the Presidents "on all matters of academic administration related to federation."

As both Presidents have often remarked, "Federation is not a fact, but a process." The Study Commission, in the period of its activity, achieved its main aim—that of delineating the pattern of future relationships between Case Institute of Technology and Western Reserve University and helping to create the climate in which major steps were taken toward the proposed federation.

Much remains to be done. A planning mechanism has been established within the new University to deal with immediate problems arising out of the joining of the two institutions and with the opportunities for expansion, innovation, and improvement made possible by the sweeping reorganization and mobilization of resources that are only just beginning.

The Case for the Private University in America

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Since Sputnik, higher education has attracted growing attention in the nation. In addressing its agenda, the Study Commission found that the issues confronting Case Institute of Technology and Western Reserve University typify America's problems of higher education. The same issues will face the federation to be. Is size-small or great-the enemy of quality? How can we reconcile specialized advanced inquiry with the growing interrelatedness of knowledge across disciplinary boundaries? How can faculty research and teaching responsibilities best reinforce each other? Can a university provide new kinds and levels of service to its public constituencies without compromising the standards of education? How can the individual student be integrated within growing and often chaotic organisms? How can the university find the means to excel and grow in the face of swelling costs for student support, faculty salaries, classroom buildings and laboratories, and for libraries and specialized facilities?

Evidently, higher education in America confronts severe challenges, and its ability to surmount them is by no means self-evident. The decision to form a federated University means that the opportunity exists to confront these issues with a better use

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of resources and with a unified leadership. It does not mean that the problems have been eliminated or reduced in seriousness.

The first question in a sense is, "Why private education?"

It is well to note the semantic pitfalls inherent in this formulation of the problem. We are accustomed to speaking, and perhaps thinking, of private universities on the one hand, and public universities on the other, as if there were a clear line of demarcation between them. This distinction is too simple. Both kinds of institutions serve both public and private purposes. Society benefits from the trained leaders, professional men, scholars, and educators who emerge from the private universities as it does from those who graduate from institutions supported directly by state and local governments. The value of research conducted in a university does not depend on whether that research was carried out in an institution which is privately supported, or in one which is part of a governmental system. It is indeed increasingly common for privately sponsored institutions to seek and receive substantial financial help from governmental sources. Most notably, they receive federal support for research and training. State support of private colleges and universities is also growing. On the other hand, state universities do not hesitate to seek, and fortunately often obtain, private support from foundations, private companies, and individuals, just as do the private institutions. In fact, state universities are to be found among the country's most richly endowed universities. These facts explain the growing reluctance to identify the two categories of institutions as "private" and "public." Instead, we are coming to use the terms "state-controlled," "state-supported," "state-assisted," and "state-related" to describe the latter category. These terms, while clumsy, far more accurately reflect the contemporary reality.

Moreover, it is wrong to conclude that excellence and leadership are the attributes of one category of universities and not of the other. The great state universities, and the great university systems in Michigan and California, to choose obvious examples, attest to the capacity of state-supported institutions to provide fine education, to engage in significant research on a large scale, and to innovate in patterns of instruction and organization with imagination and relative freedom. On the other hand, too many private institutions are crippled by inadequate support or constricted in their freedom and their ability to innovate by the narrow outlooks or the timidity of their administrations, boards of trustees, and benefactors. Nor can it be said that one category of universities is better able than the other to pay the price of excellence, whether it be measured by per student expenditure, faculty salaries, or investment in capital plant and equipment. We can all think of institutions from both categories which are strong in these respects, as we can think of institutions in both categories which are weak in these respects.

Why, then, is it important that private universities prosper, if it cannot be said that their private character assures unique achievement and unrivaled leadership? In the American system, the answer in principle is that diversity itself is important. We have learned that variety is valuable for its own sake. We believe this not because we expect that preserving private institutions of higher education side by side with government-controlled ones will ensure that the private universities will in all cases be better and play pioneering roles, but rather to keep alive the opportu-

nity for them to do so.

We have learned that political considerations sometimes override academic values in state systems. Although private institutions are not immune to non-academic pressures, they are less
likely to find it necessary to reach educational decisions under
the influence of considerations that have little to do with the
educational process itself. They are more likely than state universities to have freedom to experiment. Some of our private
institutions are unrivaled in their achievements and leadership.
That leads us to believe that, if private institutions are well and
imaginatively led and adequately supported, they can perform
standard-setting roles and provide examples and stimulus for the
state-supported institutions.

The implications of diversity are not one-sided. The private institutions' capacity for leadership depends in part on their freedom not to succumb to all demands made of them, to be selective in their decisions as to programs, faculty, and students, and to exploit their flexibility and ability to act rapidly. In this, they benefit from the availability of state institutions to bear the loads which they cannot accept.

The Case for the Private University in America

Each kind of higher education, thus, seems likely to benefit from not only the survival but also the flourishing of the other.

In any event, the private institutions exist and command the support of their trustees, faculties, students, and alumni. It makes sense to take the fullest advantage of these existing assets, especially at a time when the demands for good higher education exceed our total educational resources.

In Ohio, particularly, the case for supporting good private higher education is a strong one. By several significant indicators -appropriations per full-time equivalent student, appropriations per capita, the amount of increase in the latter in 1964-65—Ohio ranks well behind Illinois, Michigan, and Indiana in its support of higher education. Of these states, only Illinois has fewer fulltime equivalent students per million population. Despite the critical importance of graduate education to the economic, cultural, and educational life of the state, Ohio still sends more students out of the state for graduate work than it accepts from elsewhere, although the reverse is true of Illinois, Indiana, Michigan, Pennsylvania, and Wisconsin. A state which, while ranking fifth in total personal income in the nation, and sixteenth in per capita income, ranks only forty-fourth in its per capita state support for higher education surely does need the challenge of excellence in its institutions of private higher education.

It is a hopeful sign that Ohio has decided to entrust leadership in higher education in the state to a professionally staffed Board of Regents. In the interval since the Board of Regents came into existence in 1963, there have been encouraging signs of progress in state commitment to higher education. The testing time has been too short, however, and the evidence in other respects too limited to justify the conclusion that higher education in Ohio does not require the stimulus that can be provided by dynamic private institutions.

Moreover, the North Central Region, of which Ohio is a part, while it has many private colleges, is underserved by private universities compared with some other parts of the nation. Although this area contains 29 per cent of the national population, it has only 17 per cent of the institutions regarded by the Council for Financial Aid to Education as major private universities, and these universities have only 18 per cent of the faculty, 15 per

cent of the student population, and 18½ per cent of the total endowment of institutions in their category. By contrast, New England with 6 per cent of the population has 17 per cent of the comparable universities, 16 per cent of the faculty, 15 per cent of the students, and 34 per cent of the total endowment. Of the twelve states of the North Central Region, only five—Ohio, Illinois, Indiana, Missouri, and Wisconsin—have institutions regarded by the C.F.A.E. as major private universities. In Ohio, Case Western Reserve University will be the only one.

The University is the only presently apparent opportunity in Ohio for an excellent private university. Indeed, Case Western Reserve is the nation's most clearly visible chance for an excellent private university between the Atlantic region and Chicago.

The Case for the Private University in America

The Future of Case Western Reserve University

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he Need for Rational and Selective Choice

The new University will begin its federated career with many advantages. It has a long tradition of undergraduate education, one of the nation's strongest and most respected medical schools, a fine engineering program, some other professional schools of high quality, rapidly growing quality and strength in the sciences, and occasional areas of achievement or potential achievement elsewhere in the University.

Although the federated University will start with unfulfilled needs for buildings and facilities, it inherits substantial physical plant built over the years by the two constituent institutions. Its combined resources in endowment and funds held in trust exceed one hundred million dollars and place it in the top twelve private universities.* Its faculty is large, improving in overall quality, and increasingly aggressive in the quest for academic excellence and growth. Its student body has been growing in both quality and diversity over the years and should, if the trend continues, stand comparison with student bodies anywhere before too many

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^{*}Book value. In market value, Case Western Reserve University will be fifteenth.

years have passed. Moreover, the University may be unique among its peers in the nearby cultural resources and programs from which it may benefit both in the contributions of its neighbors to the cultural atmosphere of the campus and in the possibilities for developing beneficial joint academic programs.

There are weaknesses, of course. The libraries clearly need to develop—in staff, facilities, and book acquisitions—if they are to support the growing intellectual enterprise adequately. Programs in the arts and humanities and in the social sciences generally fall short of the standards achieved in some other parts of the University. Some of the professional schools, similarly, have not yet attained the standards of the leading ones.

In short, the University will have opportunities for strengthening service across a broad front. Some of these opportunities will result from strengths already attained—chances to ascend from high plateaus already achieved to even headier altitudes. Other opportunities will exist for almost the opposite reason—in some fields strength will have to be created if the University is to discharge its educational obligations fully. In some cases, the opportunities will derive from the growing mutual overlap of fields of knowledge producing new combinations of interest and talent and requiring new organizational responses. Still other opportunities will be presented by scholars who have aggressively developed their fields of special interest into subdisciplines and eventually into new disciplines demanding recognition in University programs, budgets, and organization. Community needs related to academic capabilities will provide still further opportunities.

A good university is and should be a place where able and aggressive scholars clamor competitively for attention, recognition, and resources.

In combining Case and Western Reserve, it will be a very delicate matter to achieve the appropriate balance—involving enough planning, of the right kind—to enable the administration and Trustees to make wise decisions without too severely impeding the natural aspirations of qualified faculty. Planning—intensively pursued as a major function, adequately staffed—will be a necessary ingredient in the University's growth. However, plans should not be regarded as molds or templates into which

the faculty and academic programs must fit. A good university is unlikely to be tidy and a tidy one is unlikely to be very good. Rather, plans should be the means by which the administration and Trustees can understand the benefits, risks, and costs of saying yes or no to faculty proposals.

The role of research in the University poses another central issue of balance. Universities are distinguished from other institutions of higher learning in their "responsibility for providing the highest education."* Graduate work, therefore, and research as an integral component of graduate work are a distinctive element of the university.

The federated University will start out with vigorous and growing research programs concentrated in, but not limited to, the sciences and engineering. Research will beyond a doubt continue to be one of the University's major functions. In cultivating its research activity, the University must recognize the need for overall balance in the institution so that the research function does not absorb a disproportionate share of energies that must also be applied to its teaching and service missions.

Research is an essential means of graduate instruction and has growing relevance to undergraduate instruction as well. It enriches instructors' contributions to the curriculum. It contributes to the substance and development of the curriculum itself. It is important to ensure that these benefits of research are available throughout the University and not too heavily concentrated in some fields with the consequence that the University's quality flags in the others.

As an institution of teaching and learning, the university depends upon the symbiotic relationship between teachers and students. There are other kinds of institutions in which research is carried on for its own sake. The university is the only institution where the intimate relationship between research and teaching can be cultivated. In planning research, attention should be paid to this relationship. It should also be taken into account in the composition of the faculty.

It is generally desirable that faculty members should not only

The Future of Case Western Reserve University

^{*}Henry T. Heald, "What Is the Role of the Modern University?" Western Reserve University Outlook, Fall, 1966.

teach graduate students but should also regularly teach undergraduates as well. Each faculty member should thus, as a rule, carry out his own research, writing, and consulting interests, instruct graduate and undergraduate students, serve on university committees, and otherwise participate in the governance of the university.

Another problem of balance is posed by the relative strength of the sciences and engineering contrasted with the relative weakness in the social sciences and humanities. Certainly, it would be foolish and unproductive to set out to adulterate the strengths already achieved or to fail to take advantage of their potentials for qualitative growth and leadership in the University. In fact, we suggest hereinafter that the University might well seek its special identity in a candid recognition that it is and will remain strongest in the health sciences, the other sciences, and engineering.

The time has surely come, however, when the University should attach priority to building its strengths in other fields. Perhaps it is too much to hope that this University can achieve leading quality both in the sciences and in the social sciences and the humanities. In the short term, probably that cannot be achieved. However, the scientists recognize that they cannot prosper in a University which does not achieve a certain level of vigor in the other fields and leadership in at least some departments and programs. We believe that the time has come for the University to attend to those fields which have not had the encouragement or received the resources which they need to grow.

Questions have arisen and will arise about the appropriate size of the student body. As a private university challenged to aspire to academic excellence, Case Western Reserve University should remain relatively small. Developing strength in some fields will, however, require greater faculty and student numbers and the University should not hesitate to undertake such growth when it is necessary to attain desired quality. Elsewhere in this report, we suggest that in some fields the reverse may already be true and that, as a result of federation, some departments are larger than they need to be in the interest of quality. Size for its own sake does not seem a suitable goal if the overall objective is to maintain a relatively small, high-quality institution. The result

should be better balance in numbers of students between the sciences and the social sciences and humanities.

We are aware that modest increases in the size of the undergraduate colleges at Western Reserve are contemplated. We feel that even a somewhat larger expansion of undergraduate enrollment would not be inconsistent with the overall objective.

Another question that may arise about balance is whether there is an ideal ratio in a university between numbers of graduate and undergraduate students. Today Case Western Reserve University has about 4200 full-time undergraduates and about 1700 full-time graduate students, a ratio of about two and onehalf to one. If the 1650 professional-school students are included in the graduate student category, the ratio becomes about five to four. These ratios pose no special difficulties nor can we see that they offer any special advantages. We see no rule of thumb guidelines to the appropriate ratio between graduate and undergraduate students. Perhaps this balance can be allowed to work itself out over time. The resolution will involve, on the one hand, the pressures to increase the graduate programs and enrollments, including likely faculty pressures in this direction, and, on the other hand, the inescapable fact that the cost of educating a graduate student is greater than the cost of educating an undergraduate student.

he Need To Develop Leading and Distinctive Programs

It has already been said above that while there are fields in which the University can proceed from strengths already attained, there are also fields in which it must first create strength that does not yet exist. These fields lie mainly in the humanities and social sciences and we hope that the means can be found in the years ahead to strengthen economics, history, and languages and literature. These are fields in which the University must provide more and better courses.

However, comprehensiveness and adequacy of offerings are not enough to meet the special challenge to private universities. The private university should concentrate on work in fields and The Future of Case Western Reserve University

programs in which it can be exemplary both in the quality of what it offers and the imaginativeness of its innovations. It is challenged to lead the way.

Usually, that will mean starting with existing strengths. The principle that excellent and innovative programs best develop from existing strengths is an important one. Good programs tend to have the human and other resources needed to give impetus to growth enterprises. Their leaders know how to apply critical standards and have demonstrated an understanding of how to build. They often have established pipelines to the external sources of support on which growth depends, and have earned the attention and respect of the external agencies.

In general, it can be said that the greatest strengths of Case Western Reserve lie in the sciences, notably the health sciences. and engineering. The existing programs in the history of science and technology and bio-medical engineering represent applications of the principle of building from existing strengths. While it would go too far to suggest that Case Western Reserve can create exemplary programs only if they are related to the sciences and engineering, it may be that the University's greatest opportunities will be found in these directions. The University should not hesitate to seize on other opportunities, as has already been done in the development of the School of Applied Social Sciences and the School of Library Science, for example. It may be, however, that the University can make a special place for itself by concentrating on the intellectual interactions that can appropriately be developed beween the sciences and engineering and other fields of knowledge. Perhaps Case Western Reserve University should seek to carve out its own niche as a University which emphasizes science and technology, not only as fields of inquiry and instruction, but also as phenomena to be studied and understood as central ingredients in our contemporary civilization.

$S_{ m ome\ Opportunities}$

In the sections that follow, an attempt will be made to point out some of the directions in which the existing strengths of the University might lead. We do not intend either to suggest that all the ideas that follow can or should be carried out or to imply that what follows is comprehensive. The University may, of course, decide to ignore some of these possibilities and to carry out ideas we have not thought of.

The Future of Case Western Reserve University

The Medical School

In building from strength in Case Western Reserve University, an obvious place to start is the Medical School. The Medical School has been able both to attain high quality in its faculty, research, and student body and to innovate successfully in its curriculum. It has also insisted that the academic environment on which it depends be adequate to support its own programs, with resultant strengthening of science departments outside the Medical School. An excellent Department of Biology was built in a relatively short time span and a promising beginning has been made in strengthening the Chemistry Department. Moreover, the Medical School has been a willing partner in the fine programs with Case engineers in bio-medical engineering. The Medical School's curricular approach, which emphasizes the interconnection between real patients and laboratory science, between clinical and preclinical work, holds promise of important development of collaborative work between clinicians and scientists. Within the Medical School there is existing strength in both clinical and preclinical departments, and outside the Medical School the science departments promise to be worthy partners in collaborative enterprises.

Another promising avenue of development lies in the closer association of the Medical School with the social and behavioral science departments in developing projects and perhaps ultimately research and instructional programs. There is already within the Medical School a strong urge to broaden the concept of medical education so that doctors are equipped with what they need to know not only about the physical well-being of their patients but also about the influence of the patient's environment on his physical and emotional health. Given the existence in the University of a strong School of Applied Social Sciences, a Sociology Department of growing range and vitality, a good Psychology Department with strength in clinical psychol-

ogy, and the possibility of new work in urban studies, the development of joint programs involving these entities seems a natural way to build from strengths.

Another prospect may be presented by the need which the Medical School already recognizes to reassess its own relation to the provision of medical service in Cleveland, particularly under the stimulus of recent federal legislation in the field of health. Federally funded research and planning programs are under way in many parts of the country to look into problems in the provision of medical service locally and regionally. Such a program may be opportune here. In considering this question, it might be wise to ask whether a somewhat broader concept should not be applied. There seems to be no institution in the country dedicated to research on the provision of medical service across the board. Such a program might seek to deal with problems that arise in organizing hospital facilities, in organizing and supporting medical service in local environments both urban and rural, in providing medical service on state and regional bases and on a national scale. Such a program would require the Medical School to work closely with other units in the University having interest and qualifications in such studies, among them the School of Nursing, the School of Applied Social Sciences, the Law School, the Departments of Economics, Political Science, and Sociology, and the Division of Organizational Sciences.

Major increases in resources will be required to enable the School of Medicine to undertake these new responsibilities while expanding its enrollment and continuing as a national center for medical research.

Engineering

Undergraduate engineering education at Case has long had a well-deserved reputation for quality. The caliber of its students and of their educational experience is probably exceeded by only a few institutions in the nation. Emphasis on graduate engineering education is relatively recent at Case. Federation should help to accelerate the progress made in recent years and to improve the prospects of achieving first rank.

One of the compelling arguments for federation is that it provides a broader range of opportunities for engineering teaching

and research. One need only examine many of the new fields of engineering activity—medical engineering, bio-engineering, transportation studies, pollution control, and systems engineering—to recognize that engineering scholars need increased opportunities to establish joint programs with scholars in other disciplines. Several recent developments at Case—in operations research, behavioral science, philosophy, economics, and history—reflect this need for a more varied academic community.

The engineering faculty is small relative to the size of the total University and, particularly, relative to the science faculty. To strengthen engineering and permit full exploitation of the expanded opportunities for interaction made possible by federation will require additional engineering faculty.

The place of engineering in the organization of the University should acknowledge the importance of the activity and permit close relationships between engineering and science and the establishment of multidisciplinary programs. Its plans and organization should also permit the attraction of additional distinguished engineering scholars at the rank of full professor.

The Sciences

At both Case and Western Reserve, the sciences have in recent years been undergoing very rapid growth. Ph.D. programs in both institutions are relatively recent. Since they began, there has been great growth in the numbers of faculty and graduate students and, particularly, in the volume of research, most of it externally supported. This has been a healthy and very exciting development in the University. The problems of assimilating this growth are now complicated, however, by the merger of the three science departments and by the need to plan systematically for the science complex of the future. On the whole, it seems wise to anticipate a period of stabilization in the sciences with respect to numbers of graduate students and faculty and volume of research undertaken. In some cases, the merger of departments may even have made it desirable in the interest of quality to cut back somewhat on total numbers of graduate students and faculty. The science departments outside the Medical School now account for nearly one-third of the total budget. Further major growth in the sciences should await the day when the University

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has the resources to ensure that the sciences' proportion of the total is not substantially greater than it is today.

Nevertheless, there are prospects for significant development in the sciences. In several of the departments, for example, there is an active interest in problems of large molecules and it may be that with some rearrangement of the existing resources and with modest additions of personnel exciting new programs might be launched in the field of macromolecular studies, perhaps taking the form of a research center or institute.

Another important development is the growing interaction between biology and other fields. Biochemistry is well established as a discipline and there is a strong Department of Biochemistry in the Medical School. Some biologists and physicists are groping toward each other in the new field of biophysics and it may well be that there is opportunity here for imaginative new teaching and research. Neurobiology is another field in which there may be opportunity for creative cooperation between scientists and clinicians in the Medical School and the scientists outside the Medical School. A start has been made toward a joint graduate program between the Biochemistry Department in the Medical School and the Chemistry Department at Case. This program should be encouraged.

Humanities

The humanities are among Western man's oldest subjects of study; indeed, the original humanists of the Renaissance were students of the classical world, its literature, philosophy, and history. Today the humanities are usually assumed to include the study of languages and literatures, philosophy, history, art history, music history and musicology, religion, and sometimes even such remoter fields as dramatic arts, speech, and linguistics.

What characterizes these disciplines is their common concern with those dimensions of man's experience not easily quantified; their typical method, at least until recently, was study organized on historical or critical principles. Their central concepts are likely to be concepts of value; their laboratory is the library. The importance of humanities at their best can scarcely be overstated, for they serve the hunger of the human spirit for answers

to questions as to the ultimate purpose and meaning of life and minister to its need for beauty.

In the federated University, there will at the outset be a serious imbalance between the strength of the sciences and that of the humanities. This phenomenon is not peculiar to Case Western Reserve University, but virtually universal for reasons too well known to cite here. At this University, the imbalance will be accentuated by the nature of the federating institutions. Therefore, building excellence in humanities in the federation will be one of its major tasks and opportunities. Such excellence must exist in a true university, which claims to cover the major fields of human knowledge.

Strength in humanities is not easy to define, but one thing is certain—that more than other disciplines they seem to depend on superb teaching by men and women possessing both great scholarly gifts and the broader wisdom, lively intelligence, and understanding that give conviction to these fields of study. Too often the humanities are charged with dullness when it is the humanists who are dull. We hope that Case Western Reserve University will contribute to the national discussion of the future of humanities by giving its earnest attention to examining the quality and kind of its activities in these areas. The appointment of Humanities Coordinators is a welcome first step. They have an unusual chance to make a searching exploration of what ought to be the function of the humanities in the modern university.

At the outset, the humanities enterprise in the federation will be dichotomous. At Case, at least for the time being, there will continue to be a Department of Humanities and Social Studies to provide a core of instruction to all Case undergraduates as well as to offer several distinctive interdisciplinary graduate programs.

Western Reserve presents a more traditional picture with its departmental organization on disciplinary lines. Some of its humanities departments are of reasonably high quality, as shown by their listing in the Cartter Report* (although not in the top

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^{*}American Council on Education, An Assessment of Quality in Graduate Education, 1966.

several groups); others are obviously neither large nor distinguished.

The federation will no longer be able to afford marginal departments and programs if it is truly to achieve the excellence that is its proclaimed goal. While there will be difficult decisions to be made, it is clear that the University must make some hard choices about its undernourished programs, too small to achieve quality without a major commitment of resources.

To take a different perspective on the problem of humanities, it is possible to characterize two quite separate functions: one, the "service" function, although this is an unhappy misnomer; the other, the programs offered to majors and graduate students in the separate departments.

Both the Case required curriculum in humanities and the social sciences and the Western Reserve distribution requirements include a large proportion of work in humanities subject fields. Comparing the two curricula suggests that both schools have similar aims: to provide a core of courses that introduce the student to, and deepen his understanding of, the traditions of his culture, as well as give him some insight into the methods of structuring knowledge in non-scientific disciplines. The humanities courses also introduce him to problems of value and quality as distinguished from the factual, quantitative approaches of scientific and engineering disciplines.

This is the first opportunity: to determine the future structure, content, and staff of the best possible core program for undergraduates. Centrifugal forces are at work in the Case Humanities and Social Studies Department, inevitably so; yet the Study Commission was impressed by the vigor, morale, and clarity of purpose of many members of that department. If Case's brand of general education is valuable, then perhaps the program should be enlarged, further strengthened, and made available as a University-wide option to all undergraduates and involving the participation of interested Western Reserve faculty members. It would be healthy competition for the more conventional distribution at Western Reserve. Such a program might rely on joint appointments to it and the traditional departments and should have its own budget. This has been the formula at a number of universities where a humanities program has been successful.

The subject departments maintain initiative and control over the structure of the undergraduate major and graduate programs. Here strength depends on the recruitment of better faculty, the attraction of better students, the improvement of library resources, the provision of visiting lecturers, seminars, and colloquia. The evaluations to be made this year by the consultants from the Council of Graduate Schools, supported by the Study Commission, should provide useful guidelines for development of better graduate programs in some of these areas. Conventional moves toward strengthening humanities work may not be enough, especially since the humanities everywhere need invigoration through finding new orientations, new methods of instruction, and new forms of organization.

At the undergraduate level, many colleges and universities are experimenting with undergraduate honors programs, not, of course, in humanities alone. Some honors work is within departments and some departments at Western Reserve now provide this opportunity. Other programs, like the outstanding one at Stanford, permit a combination of Honors in Humanities with an undergraduate major in any field.

Other departments in the federation might wish to follow the example of the Western Reserve English Department in emphasizing tutorial programs and independent study for advanced undergraduates. Still another possibility is to permit undergraduates to design their own programs, with careful guidance, programs that may include a strong interdepartmental emphasis.

At the graduate level, recognition should also be given to the need for experimentation and innovation. The Case graduate programs in the History of Science and Technology and in Science and Public Policy may be singled out for their interdisciplinary character, their willingness to break new scholarly ground, and their special appropriateness to an institution with a strong scientific character. Whatever the future organization of the Case Humanities and Social Studies Department, the federation must find ways to nurture original and valid programs of unconventional character if it is to achieve distinction.

No particular pattern of organization is recommended here, nor do we wish to endorse one kind of program rather than another. What is urged is that the University recognize the ferment in

humanities elsewhere, the amount of rethinking now going on, and that it seek to provide a comparably stimulating atmosphere here. This includes graduate work as well. Solid strength must certainly be preferred to flashy adventuring, but that does not preclude the University's monitoring the revisions in the doctorate being pioneered at Yale and elsewhere, recognizing that graduate study itself is now being reconsidered in humanities, where the meaning of "research" has become less and less clear.

Related to the humanities are the fine arts. Some humanities fields study the corpus of the arts, but are not devoted to training in the arts. Music history, art history, and study of dramatic literature are humanistic pursuits; training in the performance of music, musical and literary composition, painting, sculpture, acting, directing, and designing are among the fine and performing arts. At one time, their presence in the curriculum of the university was a subject of debate. Today, there seems little question that they not only belong there, but that many forces are at work to impel them into a university setting. (In the case of music, for example, even the best independent conservatories are fighting for survival.)

Case Western Reserve University will have small departments in several of these fields, most notably in music and dramatic arts. It is doubtful that these departments by themselves can reach the size necessary to produce lively programs of performance that would be necessary for their own students and that would do so much to enhance the climate of the entire University. These activities may have their best chance for growth through cooperation with other University Circle institutions, the subject of the next section of this report.

University Circle Institutions

The federation has the chance to create a variety of programs through cooperation with other Cleveland, and particularly University Circle, cultural institutions. This report has already described the beginnings of the search for such cooperative programs. These should not be sought as mere expedients, and the University can ill afford ventures that may be hazardous drains on its resources. Particularly in the area of the fine arts, however,

some truly challenging opportunities exist, and every sign points to a growing interest in University training of creative artists.

Serious exploration should continue in order to find patterns of mutually advantageous relationship between the University and the Cleveland Institute of Music, the Cleveland Music School Settlement, The Cleveland Playhouse, The Cleveland Museum of Art, and the Cleveland Institute of Art. As the Commission noted in its earlier staff paper, "Cooperation with University Circle Institutions," not all of these institutions are equally ready to seek out University ties; but when readiness exists, the University should give its attention to finding fruitful means of working with these institutions; the federation formula was recommended partly with this in mind.

The emerging program in art history deserves special mention. This program is so likely to achieve national recognition in a short time that it deserves strong University backing; association with the distinguished leadership and prestige of The Cleveland Museum of Art promises many benefits. The relationship of art history to other disciplines, and its need of them to supply supporting strengths, may lead to a beneficial chain reaction, as has been observed in the case of medicine and its supporting basic sciences.

A possible decision by The Cleveland Playhouse to make its headquarters in University Circle and build a new theater facility close to the University is also exciting. That move would offer prospects of developing a stronger University drama program in conjunction with the professional theater and of making the theater more accessible to the University audience. The Playhouse might also find stimulus and new opportunities in proximity to the other creative arts represented in University Circle institutions, to the greater benefit of Cleveland. Long-range chances for the emergence of educational programs in television and cinematography appear better if they can build on the skills found in the professional theater. We hope that The Playhouse will decide to move to the University Circle.

The Western Reserve Historical Society is already hospitable to University faculty and students, and its library is a major resource for research in American, and especially regional, history. The Society's director wishes to emphasize the research

potentialities of his institution and would welcome the chance to be of more use to the University's programs in history. The Commission's library consultants urged that the federated University consider some formalization of its relationship to the Society; that suggestion is repeated here. Such a formal agreement might also make provision for assisting the Historical Society to organize its library materials, one of its urgent needs.

The Natural Science Museum has also shown a desire for University involvement, especially in its research activities. The Museum has internal problems not susceptible to University solution, but both the Museum and the University might find advantage in joint programs of research using Museum collections, in a few joint appointments, especially in astronomy and geology, and perhaps in some form of collaboration between the University's Department of Education and the Museum's school programs. The three audiovisual instructional support groups in the University might collaborate with the Museum staff to develop new exhibits and instructional aids.

Finally, the University Circle Development Foundation already performs valuable functions in Circle affairs. Its future role might include additional functions to serve the Circle community as a whole. Suggestions have included: the centralization of data processing and office services; Circle-wide buildings and grounds maintenance; centralized purchasing; closed-circuit television; a central calendar; and other similar activities that have a truly Circle dimension.

Social Sciences

The federation starts with neither outstanding strength or individuality in the social sciences nor obviously distinguishing advantages such as the nearby cultural institutions offer in the arts. While some of these departments have recently improved, the attainment of excellence will require major effort and will probably demand a greater proportional commitment of the University's own resources than will be necessary in other fields. We see no shortcuts to excellence.

There is the ameliorating factor that excellence in the social sciences, unlike some of the physical and natural sciences, does not require major investment in costly equipment. The social sciences in Case Western Reserve do, however, need a new building in which the social scientists can come together. They also should have improved computer facilities in that central location.

In this field, excellence depends on qualified faculty committed to vital thought, research, and evocative publication; an able and interested student body; and library resources. Although the University's share of the cost will have to be relatively high in these fields, the total cost need not be as great as what is required to build in the pure sciences.

Probably the best way to begin is to seek to attract a relatively small number of leading scholars in the senior ranks. Such scholars can be expected to attract good students and to have access to external resources to support growing programs of research and instruction. They will insist on the development of resources in the libraries adequate to their needs and will quickly attract able junior faculty to round out the picture. In these fields, as in all others, such scholars are scarce and, at the outset, the University may find it hard to be competitive with centers of established strength, although Cleveland may have attraction for scholars interested in urban problems.

From other sections of this report, it will be apparent that many significant programs are possible in which social scientists will be involved. One possible strategy for developing strength in the social sciences is precisely to seek out ways in which clusters of strength in the social sciences can grow through association with programs that build on the already existing strengths of the University.

The whole field of medical service seems ripe for a development here which might engage the participation of social scientists in the development of new bodies of knowledge and new analytical skills and might have the effect of attracting other able scholars interested in becoming part of such leading new programs. Environmental and urban studies is another area of which the same might be said, especially in Cleveland, which is a made-to-order laboratory for studies in these fields. Given the strength in engineering at Case, is there room for collaborative work in the social science side of engineering, perhaps involving analysis both of the social function of engineers and of the social problems engineers encounter in their work? The very fine program

on history of science and technology is a model which might well be emulated in relating engineers and engineering to work in social sciences.

Two of the social sciences deserve special comment. Economics should be strengthened to provide a greater range of elective choices for undergraduates and strong programs for undergraduate majors and graduate students and to make available the reservoir of economics talent needed to support instruction in the professional schools and to staff a wide range of research and training projects in association with other parts of the University. Experience elsewhere indicates that economics is best established as an academic department, as is already true of psychology, sociology, and political science. Creation of a strong department will help bring to the University economists needed in research programs in urban problems, international development, social welfare, and the delivery of medical services, among others. The Economics Department should be seen as the disciplinary "home" for economists who seek such an identification. Joint appointments, made with the clear indication of the faculty member's major affiliation, would enable many economists to serve both the Economics Department and a professional school. But economists should be free to choose from a range of possible situations involving at the extremes complete identification with the Economics Department or with a professional school.

Anthropology is the second special case. Anthropologists can make significant contributions to programs of teaching and research in a variety of areas: linguistics, sociology, international studies, urban studies. The establishment of a separate department of anthropology with a degree program is not only desirable but may be necessary to attract new faculty. This will be difficult. The number of Ph.D.-holding anthropologists is extremely small* and the demand for them, particularly in the new doctoral programs, is intense. Anthropology departments tend to be relatively small, however, and a few carefully made appointments can be sufficient to establish a viable and visible program.

^{*}There have been scarcely more than 1,200 doctorates awarded in anthropology, including archaeology. There have been seven times that number in economics and nine times that number in psychology.

Computers and Information Sciences

Case and Western Reserve have both been leaders in the development of knowledge in computer uses and information retrieval, Case through its Jennings Computing Center and Western Reserve through the Center for Documentation and Communication Research. The University now comes to a crucial decision point with respect to its future development in these fields, which are clearly destined for vigorous growth nationally. For Case Western Reserve University to play a leading role in that national adventure would involve major investment in equipment, personnel, and programs. This is a serious issue for decision by the University's leaders on which, since we have not had occasion to study the issues thoroughly, we prefer not to express an opinion.

Whatever the University decides about the route it will follow in this sphere, there is no escaping the fact that today scholarly endeavor includes the careful design of research, the accumulation and handling of data, and the application of analytical techniques. These aspects of scholarship are not new but they have been profoundly influenced by relatively recent developments: the extension of knowledge about designing research, enormous increases in the knowledge available in each field, and powerful computer techniques for analyzing data.

In the modern research university these advances in knowledge ought to be available to all faculty and students in their research endeavors. Students in all fields can benefit from an understanding of these new developments in information collection and analysis. For a large proportion of the student body, particularly those in science, engineering, and social science, competence in these matters is an essential part of a modern education.

Through the interest of the Case faculty and the resources of its Jennings Computing Center, all Case students, undergraduate and graduate, have had strong preparation in research design and in the use of the computer. The unification of the science faculties suggests that all students of science will have these advantages in the future, although this will place great burdens upon the existing computer facilities.

Students and faculty elsewhere in the University have, we believe, substantial unmet needs for education and experience in the use of computers. These needs are particularly strong in the behavioral and social sciences, business administration, and social work. It has already been decided that the Computing Center at Case will provide service throughout the University. To furnish this service to others, without serious restrictions on those now enjoying it, will require increases in computing capacity and in programming and instructional staff and attention to the requirements for continually updating the facilities. The economics of computer use call for centralized planning and development and the consolidation of inadequately staffed and under-utilized facilities. To facilitate planning and expansion of computer services, the Director of Computing Services should be given University-wide authority and responsibility.

To meet teaching and research needs in research design and statistical analysis, notably in the behavioral and social sciences and in the professional schools, additional faculty members in statistics are necessary. Any increase in faculty would also serve to enrich the degree programs in statistics.

To strengthen activities in information retrieval, several types of collaboration are possible. All of these collaborative possibilities call for the involvement of faculty now fully committed to present programs and will, necessarily, require additional resources. Faculty in the Systems Research Center, the Computing Center, and in operations research can make important contributions to research on information retrieval, thereby assisting the W.R.U. Center of Documentation and Communication Research in its mission. The same array of faculty interests, all now at Case, could help the School of Library Science to develop innovative teaching and research programs in the design and operation of library systems. Finally, cooperation among the University library system, the School of Library Science (including the Documentation Center), and the Computing Center might enable them to take advantage of national advances in improving student and faculty access to library information.

Business Administration and Organizational Sciences

The Graduate School of Business Administration at W.R.U. and

the Division of Organizational Sciences at Case are very different in nature. Their complementary strengths and interests suggest that combining their resources imaginatively can, with adequate support, produce one of the nation's outstanding centers of management education and research. The W.R.U. Graduate School of Business has a primary concern with professional education of managers and has been planning for a transition to a residential M.B.A. program, incorporating the recent developments in behavioral science and operations research that have in the last ten years transformed the character of the nation's leading business schools. The Division of Organizational Sciences combines three groups: one of the nation's earliest programs in operations research, an organizational behavior group which applies behavioral-science knowledge to problems of organizational design and change, and a recently created but rapidly growing economics group. The D.O.S., which emphasizes full-time doctoral study and research, has only a limited concern with master's level professional education.

Joining the two activities can have several results.

One result of joining these activities could be the development of one or more undergraduate programs in management studies. The general reaction to the severe criticism of undergraduate programs in business, even in those schools with the capacity to improve them, was to abandon them. Business education has become professional education at the post-baccalaureate level, and the opportunities to establish high caliber pre-professional undergraduate programs have been left unexplored. Unique, attractive programs with heavy concentration in the social sciences and quantitative methods could be established, at relatively little increase in cost, to serve students in the three undergraduate colleges: Case, Adelbert, and Mather. The present Case undergraduate program in Management Science suggests some of the possibilities, although that curriculum at present is built upon freshman and sophomore work in science.

Another, and by no means the least important, result could be the creation of a progressive master's degree program in management with a residential student body of high quality.

A third result could be the strengthening of several graduate programs now offered by the Division of Organizational Sciences

and the Graduate School of Business. Statistics, operations research, and economics are disciplines which should build their separate degree programs, cooperate in the graduate programs in management education, and cooperate in teaching and research programs throughout the University. Without such increases in size, particularly in statistics and operations research, they will fail to satisfy the several important needs for their services.

A fourth product of federation could be the establishment of a Graduate School of Business Administration and Management Science formed by joining all faculty members of the Graduate School of Business and the Division of Organizational Science, except those economists who might prefer to devote all of their time to a Department of Economics. This amalgamation would encourage the very close associations needed to develop outstanding undergraduate and professional education and to promote joint research.

A fifth, and perhaps most noteworthy, consequence might be progress over time toward establishing a graduate program in administration, perhaps a school, separate from the Graduate School of Business and from the other professional schools and graduate programs in the University. Such a program would, for the first time in any university, assemble a significant array of teaching and research activities concerned with administration as a phenomenon, cutting across business, government, education, social welfare and other professional areas. Its faculty, many of whom might hold joint appointments in the several related academic disciplines and professional schools, could provide courses basic to each of the specialized professional programs, emphasizing and adding to the body of knowledge common to all of them. This pioneering proposal merits serious and objective consideration.

Law

The Western Reserve Law School has a distinguished history. The importance of having an outstanding law school in Cleveland cannot be doubted. Such a school would fill needs of the bar in the city and more broadly in the Midwest. The problems of the city, moreover, call for the kinds of contributions a strong law school can make.

It has unfortunately been true that the Law School, after closing down during World War II, has not yet regained the position it held in earlier years. Now, however, under the leadership of a vigorous new Dean and with plans well advanced for a new Law School building, the omens seem more promising than at any time in recent years. The Law School plans to expand its faculty to about double its present size, to enhance the quality and increase the numbers of students, to re-examine and update the curriculum, and to strengthen its library by improving the staff, organization, and cataloging. These plans are promising and deserve support. The Law-Medical Center has become well established in the area of forensic sciences, and is now developing useful training programs for law enforcement officers. The prospective development of new University programs in the field of urban studies, particularly bearing on Cleveland problems, may provide important opportunities for Law School interaction with other parts of the University, especially in the social sciences. The Law School might well seek to achieve a distinctive character through an emphasis on the legal problems in our contemporarv urban life.

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The Future

Urban and Environmental Studies

The joining of Case and Western Reserve establishes in a single institution a broad range of academic disciplines and professional skills having application to today's urban problems. These problems of an urban society are to be found nationally, but they are keenly felt in Cleveland and, perhaps most seriously, at the very borders of the University. We do not doubt that the University will develop a substantially increased commitment to the solution of urban problems.

In developing a controlled response to overwhelming urban needs, the University and those who look to it for help should recognize its special responsibility: the advancement of knowledge through teaching and research. No other type of institution is devoted to the education of professional talent so urgently needed in society and to the development of the scholar-teachers who will serve future needs for research and higher education.

The intimate relationship between science and society is one of the great forces that have caused Case and Western Reserve to

plan their future together. One urgent and timely means of combining an understanding of technology and man is to study his physical environment—the planning and designing of structures and cities—and, thereby, to create unique and vital teaching and research programs.

The array of relevant activities at Case Western Reserve University, at other University Circle institutions, and in the research laboratories in the Cleveland area provides a base for accomplishment in environmental studies that may be equaled in but a few cities and excelled by none.

One possibility, now being explored by a faculty group, would develop new upper-division undergraduate programs relating to the urban environment. These multidisciplinary curricula could provide broad undergraduate preparation for graduate study in social science or professional study in architecture, urban design, social work, and city planning. Other possibilities include graduate teaching and research in environmental studies, city planning, and urban design. Related to these activities are several parts of the University, including architecture, the Engineering Design Center, the Center for the Study of Materials, and the programs in social science, business, public management, organizational behavior, operations research, and structural engineering.

Establishing these new activities will require additional resources of faculty and facilities and support for research. The innovative character of these programs, however, enhances the possibility of developing the needed support.

Faculty in the Case Western Reserve academic community are now engaged in a wide variety of projects related to the city. Their activities, perhaps not fully appreciated by the general community, reveal many of the ways in which a university can make its contribution to urban progress. There are teaching programs in social work and education that reach a large number of employed persons who are increasing their professional qualifications. There are many courses, particularly in the social sciences, that provide an urban aspect to many degree programs, both undergraduate and graduate. Faculty members are engaged in urban-related research, and many provide consulting services related to community problems. The University has undertaken community projects in education for disadvantaged children, field

training for students, and consultation and staff development for social agencies, among others.

An urban studies center or a cluster of several problem-defined centers, e.g., community health, housing, urban education, transportation, information systems, should be established. This will permit a significant expansion of these programs of teaching, research, and extension work, strengthen the planning and coordination of such activities, and provide a central core of supporting staff and facilities. A moderate base of financial support can enable such a center or cluster of centers to function as a reservoir of data on urban research, University resources and activities, and community activities and problems. In creating this organization and in securing support for new activities the possibilities for collaboration with educational, research, and community-service organizations should be explored, but the University must be prepared to lead the way.

International Relations

One of the things that is obviously missing in Case Western Reserve University is a major emphasis on international affairs. In the twentieth century, it is inconceivable that a university can be great unless it has strong, well-traveled bridges to the world beyond the American shores. Today most leading universities have strong international relations curricula either as separate programs or in a social science department. They also tend to have research in the international field, good relevant library resources, strong related language programs, substantial numbers of foreign students, and, often, overseas assistance programs.

With minor exceptions, the federation will begin with a blank slate in these respects. There are a few faculty members in the social science departments who are in one way or another interested in international affairs. Case has reciprocal programs with sister institutions in Mexico and India, and some visiting professorships are invariably held by distinguished foreign scholars. A number of faculty members in various fields have international professional contacts and interests. However, all of these together do not comprise an international program worthy of the name. Nor do they add up to a very promising basis for building one.

Much can be done to cultivate the international relationships of faculty and existing programs. Travel to international meetings can be encouraged at relatively modest cost. More faculty members and students from abroad can be encouraged to come to the University. Efforts can be made to cultivate relationships with institutions abroad in fields—such as medicine, engineering, library science, and social work—in which the University has strength.

All of this, while helpful and desirable, would not add up to the international relations curriculum that is sorely missing on this campus. Before the University can have such a program it will take, first of all, a decision that it must be built and, thereafter, considerable painstaking effort and expense. Broadly speaking, there are two strategies which are not mutually exclusive. Whatever strategy is followed, responsibility and capacity for planning in this field should be centrally assigned.

The first strategy is, simply, to buy an international relations program. This would mean finding and hiring faculty to give courses and conduct research in fields which are not now covered or are inadequately covered. Such people are scarce and expensive. They would need the assurance that resources not now available in the library would be provided for them. As to where they might be located in the University, various patterns are feasible. They could either be grouped in a department of their own, established as a program within one of the existing departments, presumably political science, grouped in an interdepartmental program under some kind of committee arrangement, or organized in a center, institute, or school transcending departmental boundaries.

The second way is to try to build international relations on the strengths that already exist here. It might prove feasible to build an international development program based on the greatest relevant strengths, which are to be found less in the academic social science departments than in the professional schools. A quite interesting small and specialized program of research and instruction might be developed on problems of international development if the health sciences schools, SASS, the School of Library Science, the Engineering Division, and perhaps the science departments were encouraged to develop interests in de-

velopment problems in their fields. They would have to collaborate with the relevant faculty in the Departments of Political Science, Economics, Sociology, and History and in the other professional schools. Beginning this way might provide a program of some distinctiveness which might attract other social scientists to come here and thus to build the strengths in the academic departments which do not yet exist. This strategy too would require a considerable addition to library resources.

Whichever of the two strategies is followed, attention will have to be paid to strengthening language programs. The existing language programs are not all as strong as they ought to be. It is a striking fact that no non-Western languages are taught in the University. It is hard to see how strength in international relations can grow, whichever strategy is followed, unless strength is also built in at least one non-Western language and probably more than one.

Undergraduate Education

The federated university must honor its commitments to presently enrolled undergraduates so that they receive the designated degrees they came here to earn. Students are now registered in one of three Western Reserve colleges—Mather, Adelbert, or Cleveland College—or they are part of the undergraduate body at Case. In the long run, however, it is unlikely that this strict compartmentalization will be permanent. The merged science departments alone make it probable that there will be a blurring of lines in the present collegiate organization. And however strong Case "patriotism" may be, one may ask whether it is educationally desirable for science and engineering students to be isolated from students with other interests, considering how much students help to educate each other during the college years.

The future of Cleveland College is also in doubt. Its enrollment of part-time degree students is gradually declining in the face of the growth of Cuyahoga Community College and Cleveland State University. While it may be decided that part-time, highly qualified students should continue to enroll in the University, it is questionable whether a full-scale collegiate organization is necessary to sustain them.

These uncertainties should be seen as opportunities, provided by federation and concurrent developments in the state university system, for the University to re-examine the organization and content of its undergraduate programs.

Such re-examination becomes especially desirable in the light of the extraordinary excitement found elsewhere, in such places as the University of Kansas, Fordham, Rutgers, the University of California at Berkeley and at Santa Cruz, Oakland University in Michigan, and the University of the Pacific. At each of these institutions, and at many others, the issue of undergraduate education is being approached in inventive, imaginative ways.

The organization of experimental core curricula; the creation of "colleges within the college"; the development of independent study programs; the establishment of foreign-language colleges; the creation of undergraduate programs in non-Western civilization; block registration in lower-division courses of students who live together; work-study programs of various kinds—these are only a few of the innovations now being tested at other universities.

What is being done elsewhere is not a prescription for what should be done here. Each institution must evaluate its own problems and seek its own solutions. What we endorse is the principle that no university wishing to remain competitive in the market for the best undergraduates can afford to stand pat. Social change alone means that today's students have different needs and expectations from those of the past.

Furthermore, undergraduates often quite rightly feel that their education is not given the priority it deserves in the research-oriented university, although the high tuition they pay is a vital source of private university income. An undergraduate does pay a certain price when he chooses a university over an independent liberal arts college. He often gives up the special atmosphere and intimacy of association with his contemporaries and with the faculty that characterize such colleges and accepts instead the relative anonymity and personal isolation of the larger, more complex institution. He expects and should receive benefit in return. An important part of that benefit is the availability to him of the distinguished faculty members and rich library and laboratory resources typical of great universities.

Excellent graduate programs are certainly the identifying mark of major universities and Case Western Reserve University must continue to develop and support these programs. To emphasize the need for excellence at the graduate level, however, is not to minimize the need for the University to consider carefully the role, quality, and purpose of its undergraduate colleges. In fact, undergraduate education profits from juxtaposition to graduate work, since the best scholars are more and more to be found only where graduate programs exist and advanced research is going on. Some of the best liberal arts colleges themselves are now recognizing this, and are seeking ways to offer graduate-level opportunities to their faculties. No less than graduate students, undergraduates benefit from instruction by the leading workers in a field of knowledge who can share with them the excitement of their own advanced work. It is desirable that top faculty members teach both graduates and undergraduates if the latter are not to feel slighted in the attention given to their education.

Private universities, particularly, have an obligation to do their best to lead the way toward solutions for this problem of achieving an equitable balance between graduate and undergraduate education. Self-interest alone dictates that they do so, for the satisfied undergraduate is often an institution's best representative in helping it to attract other good students. He is a potent source of future financial support. And his excellence, when he is excellent, is a lure for good faculty.

We regard this challenge as one to which Case Western Reserve University should respond, both in seeking to meet the needs of its own undergraduate students and in providing experimental prototypes to be tested and emulated by others.

Community Service

The greatest service a university can render to its community is to perform well its primary educational missions. That criterion should be applied in judging how a university should respond to its many opportunities to perform service to the community and how to react to the many pressures brought to bear upon it to do so.

The standard does not, however, mean that a university can afford to turn its back on the needs of the community. Universi-

ties are by now accustomed to performing major service in the field of research and training for the federal government. That is as it should be, although care should be taken to ensure that projects which are chosen fit into and enhance the educational mission of the university.

The nation is not the only community with which a university must be concerned. Case Western Reserve University faces particular problems and challenges in its relations with Cleveland and concerning the service it renders to Cleveland. It is hard to argue that a university, which is a public-service institution, supported by public-spirited citizens and by governmental funds in various forms, has no obligation to deal with the public problems in its urban environment.

It has been vigorously urged, for example, by James Perkins, the President of Cornell University, that public service is one of the major responsibilities of universities in America and that historically American universities have become differentiated from others in this respect. We would argue that this challenge to the university—that it should do what it can to help—is in any case reinforced by the university's own interest in its primary educational missions.

The university is not self-reliant. Case Western Reserve University depends heavily on the support it is able to generate from national agencies, both governmental and private, from its alumni, and from supporters it is able to win in and around Cleveland. For all of these and most importantly for the last-named, the service the University renders to the community is an important influence on the willingness to provide support. Unfortunately, W.R.U. is widely believed in Cleveland to have isolated itself from the problems of the community. This we believe to be untrue. However, if the federated University is to generate stronger loyalty in the Cleveland community, it must perform more service and probably should proclaim the rendering of such service to be one of its accepted obligations.

There is a second factor, namely that the University can not expect to be able to insulate itself from its surroundings. The University Circle is, but cannot be expected to remain, a relatively tranquil island in a turbulent, rapidly changing flood of social problems. The University's welfare and the welfare of its

large population of students, faculty, and staff cannot in the long run be assured unless the environment is benign. The University can help to facilitate the solution of the social issues which are roiling the surrounding waters in Hough and Glenville. It can also, through its action, help to win the sympathy of its neighbors on whose benevolence it is in some measure dependent.

It can, particularly, look to the improvement of its bridges to. the city. In helping to arrest the deterioration of the neighborhoods around the University Circle the University can open up opportunities for imaginative programs to deal with social problems of the city. One example, perhaps deserving exploration for future action, would be the building of an experimental school, to deal especially with educational problems of integration, on the edge of Hough and involving the leadership and personnel of the University's Department of Education. An excellent step in this direction has already been taken in that department, a thoughtful training program to enable unaccredited teachers hired in 1966-67 by the Cleveland school system to obtain their accreditation. That program, involving training staff both from the Cleveland school system and from the Department of Education of the University, will hopefully result next year in direct involvement of the University department in supervision of training programs in several public schools to be staffed by next year's class of trainees.

This project is but one of the many in which the Department of Education and the School of Applied Social Sciences and other schools and departments of the University are involved. It strongly suggests that there are missions appropriate to the University which it can perform in the future in the interest of the community. The Department of Education, showing promise of vigorous development under its new chairman, may have a strategic role to play.

There is, of course, a major problem of selectivity. The problems of Cleveland are overwhelming in difficulty and number. The University can hardly be expected to deal with all of them. We believe, however, that there will be many problems, like the example above, on which the University can help without impeding, but rather serving, its primary educational mission.

In this respect, as in other choices it must make in responding

to the needs of the outside world, the guideline should be that any project entered into should not only serve the community but should also serve the University's own educational mission. While initiative from all parts of the University, indeed from individual faculty members, should be encouraged, the University should have a central office of community programs to coordinate community service activities.

Mature wisdom will be required to match community needs with the University capabilities that promise greatest returns in understanding and education as well as in service. Such selectivity will also help to ensure that the University's contributions and those of its faculty are at the highest level of capability. Another criterion is the prospect of a multiplier factor. The University should not put out fires; it should help to set goals and patterns that will enlist and energize the effort of others.

In terms of the example given above, an experimental school should be seen as a means to serve Cleveland by devising model programs for emulation and also as a laboratory in which scholars in the field of education can enhance their own scholarly knowledge in the interest of their research and university teaching responsibilities. It is almost a cliché to point out that Cleveland is a vast laboratory of educational, social, economic, and political problems. The suggested guidelines should not prove a great obstacle to the identification and implementation of projects which can be both socially and educationally useful.

Another form of service the University can render is continuing education. As the rate of change in knowledge accelerates, particularly in the sciences, so does the need to provide opportunities for mature men and women to refresh their knowledge and to catch up with advances in their fields. The University can help meet this need by continuing to provide opportunities for part-time enrollment for qualified students in its regular graduate programs and professional schools. The departments and schools can themselves administer such enrollments.

Both Western Reserve University, through Cleveland College, and Case, through its office of Special Programs, have offered special programs of continuing education—seminars, summer institutes, and the like. The special programs have met a community need, although they can represent a diversion of resources

from the University's main functions. Perhaps it would be best to create a single office to coordinate such programs throughout the University, to ensure that activities in this realm do not represent a drain for the University and, perhaps most important, to take leadership in devising means to meet this community need in ways that reduce the University's responsibility.

The University renders great service to the economic life of the region by making it more attractive to highly educated persons and to those companies which find its influence important in attracting technical and professional employees. In a more direct manner, the faculty, particularly in science and the professions, through consulting, research, and special educational programs, advance the economic well-being of the community. Finally, and most visibly, the creation of the University Circle Research Park opens new possibilities for creative interaction between the University and industry. We believe that the development of this research park offers significant benefits for the University, the community, and the research organizations—scientific, technological, medical, social science, and educational—that might establish activities therein.

Consolidation of Non-Academic Functions

The Boards of Trustees, in their resolutions on federation adopted in January, accepted "the Study Commission's recommendation that the business, administrative, and planning functions of the two institutions should be consolidated" and requested the two Presidents to consider how this task can be efficiently carried out with a view to its earliest feasible accomplishment.

The consolidation of non-academic functions promises many future benefits. The level of service can be raised in some respects, and many of the proposed expansions of academic programs and enrollments can be serviced without additional cost.

The consolidation of non-academic organizations does not call for completely centralizing them. Nor does federation imply that Case and Reserve will maintain their present—and different—patterns, with only those modifications needed to permit collaboration. Rather, we hope for a newly designed administrative structure with unified leadership, attention to the needs of the

component units, and improved service and economies of operation.

Careful combination of the resources and experience in both organizations may produce a highly desired result: a decentralized pattern similar to the one now found at W.R.U. and in other large universities, drawing upon the resources of managerial personnel and technique now found in Case.

Early consolidation is desirable to realize benefits as soon as possible and to prevent the development of patterns of separate operation that may be difficult to change at a later time. Perhaps more important, early consolidation of non-academic functions must take place if Case Western Reserve University is to achieve its primary academic objectives, unify academic programs where desired, and develop and administer the major increase in resources and programs contemplated for the next decade. It is particularly important to consolidate the University's planning apparatus and its instruments for internal and external communication: financial, academic, and physical planning; accounting; data processing; public relations; and admissions activities.

inancial Needs

Case and Western Reserve are, separately, institutions with high goals, beset with the need to satisfy the demands for new resources and for the allocation of existing resources. It was these high goals that brought the two schools together in federation. The process of federation has augmented these aspirations and created possibilities for new activities that will, added to existing programs, require levels of financial support unthought of a few years ago.

The essential ingredient for achieving first-rank national stature is the strengthening of the faculty. This will require some increases in the number of faculty to mount new programs. It will require additional faculty to permit some departments to attain a size sufficient to offer strong graduate programs, to decrease the overdependence in some departments upon part-time faculty, and to permit some reductions in teaching loads in order

to provide time for program development and for individual research, particularly in those fields where outside support for research is uncommon. In addition to general salary increases in line with faculty salary patterns nationally, selective salary increases will be required to retain faculty members whose accomplishments have brought them attractive offers to join other faculties.

While the University would be wise in upgrading the faculty to seek outstanding, established scholars at the rank of full professor, it should also concentrate on finding younger people with high promise of future distinction and continuing productivity. Faculty members of this character, with a record of, or with high potential for, substantial accomplishment, will provide leadership for new and existing programs. Above all, they will increase the University's capacity to attract other scholars of note, outstanding students, and the most promising younger faculty members.

The goal will not be achieved quickly and the recruitment campaign will be an extended process. As the recruitment campaign progresses and promising young men are drawn into the faculty, it will be necessary to supplement the campaign of recruitment with a campaign of promotion. In time, as the new younger men realize their promise and move up the academic scale, the proportion of full professors to the total faculty may be expected to increase significantly over present levels. Success in the programs of recruitment and promotion will thus bring not only higher salary levels but a higher proportion of faculty at the senior, more highly paid, levels. The table below shows the picture with respect to faculty compensation and the percentage of full professors in the ten most highly ranked major private universities in the country. If Case Western Reserve University succeeds in this recruitment campaign, it should expect its salaries and percentage of full professors in the faculty to end up somewhere in this range. Assuming that the result is to place Case Western Reserve at the average level among the top ten, we estimate that the cost would be an additional two million dollars per year in the faculty salary budget, at today's salary levels. Assuming further that the result is achieved over a ten-year period, this would mean an annual average during that period of about one million dollars a year more than the present salary budget.

Faculty Compensation i	in Major	Private Universities	(1965-66)*
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	ENDOWMENT Book Value (Millions)	TOTAL FACULTY			FULL PROFESSORS		
1		Number	Average Compen- sation	A.A.U.P. Grade		Percentage of Total Faculty	A.A.U.P. Grade
Harvard	\$567	785	\$17,600	A	427	54	Α
Yale	358	754	14,169	Α	280	37	Α
Columbia	188	871	14,302	Α	355	40	Α
Princeton	173	506	14,797	Α	216	42	Α
Chicago	170	745	16,377	Α	334	44	Α
Stanford	163	584	14,894	Α	323	55	Α
Cornell	145	660	15,146	Α	296	44	Α
Northwestern	135	619	14,908	Α	258	41	Α
Johns Hopkins	112	.219	14,430	Α	104	47	Α
Pennsylvania	93	705	13,887	Α	256	36	Α
Average for abo		644	15,123	Α	284	44	Α
CASE-W.R.U.	104	591	11,676	В	147	25	В

*Notes

- In conformity with general practice in reporting faculty compensation, only full-time, non-medical faculty are covered by these data.
- (2) The ten private universities were selected on two bases: (1) they are the best endowed institutions; (2) in the 1964 A.C.E. ratings of graduate faculties they were the highest ranked ten.
- (3) Compensation is for 9-10 months of service and includes fringe benefits.
- (4) A.A.U.P. grades for full professors are:

A=average compensation \$18,720-\$23,289

B=average compensation \$14,960-\$18,719

To meet projected operating needs of existing programs and to replace substantial amounts of support which will be exhausted in the near future will require approximately \$2,000,000 of new annual support.

Library strengthening, including major increases in acquisitions and staff, will require from \$500,000 to \$1,000,000 annual increase above the present budget level.

Growth in some present programs, enlargement of some departments to permit them to reach critical size and to serve university-wide needs, and support for new programs, some of which have been discussed in earlier sections of this report, might result in additional annual costs of \$2,000,000 to \$4,000,000. This is a conservative estimate, for it represents only a 3-6 per cent increase in the present combined operating budget of Case and Western Reserve.

Expanded physical plant—land, buildings, and equipment—will be required. The health professions, Law School, student housing, and other projects under construction or being planned amount to \$54,500,000. Capital gifts and grants will be needed for these undertakings, which are not now completely funded. In addition, other needs of the next decade, including land acquisition; some construction which should take place soon such as a library addition and buildings for biology, behavioral-social sciences, and a school of administration; other subsequent construction including student athletic facilities; and computing equipment will require in the range of \$25,000,000-\$35,000,000. Thus, total construction to be completed in the coming decade may total \$90,000,000, nearly three times the amount completed during the period 1957-66. This may require funds not now provided for on the order of \$45,000,000 or more.

A tabulation of our necessarily rough estimates of the increased financial needs of Case Western Reserve University, as it strives for excellence in the coming decade, appears below. We have not included the present level of alumni and corporation annual support in this tabulation of additional resources needed, nor have we made allowances for inflationary forces.

Fund Requirements: The Next Decade (In Millions) Total Capital Increased Need if All Purpose Annual Capital Annual Needs Needs Needs Met by New Endowment Faculty strengthening \$ 1 \$ 25 Basic operating needs 2 50 Library collections and operations .5- 1 13- 25 New programs, growth 2 - 4 50-100 **Facilities** \$45-60 45-60 \$ 5.5- 8 \$45-60 \$183-260 Average annual capital needs \$ 4.5- 6 Total annual needs \$10 -14

The next decade then will call for substantial increases in support of all types: gifts and grants for facilities; funds for research

and program development; contributions from alumni, friends, and corporations for specific and general operating purposes; added endowment to provide permanent support for part of the growing annual needs, especially for faculty chairs; and increased income from present endowment.

Obtaining the resources will not be easy. This report is not the place to survey the general problem of the University's financial resources. However, we wish to emphasize several points which grow out of the national experience but are specially relevant to this University.

The University can not expect all its sources of support to keep pace with the growing financial needs. Increases in tuition and student charges are already planned. Further increases in the near future might have the effect either of unduly weighting the student body with students from the most well-to-do families or requiring great increases in funds for student support with the result that the financial benefits of the tuition increases would be in measure lost to the University.

Although national foundations can be expected to continue as a source of "seed money" for educational and research experiments, they cannot be counted on to support operating expenses. Local and specialized foundations may have more promise. In the state of Ohio, for example, there are thirty-five foundations giving \$100,000 or more annually which either do or could support higher education. These foundations are confronted with many demands, which may make it difficult for them to channel very much greater proportions of their expenditures into higher education than they have hitherto done. However, we urge the University to make the most assiduous efforts possible to raise support from such foundations. We urge the latter to take account of the strategic function of higher education in providing the knowledge and training needed for the range of functions the foundations are dedicated to serve—in social and public service, in medicine and the sciences, in engineering and in humanities and the arts.

We urge corporations in and around Cleveland to take a broad view of their interest in higher education. There has been a most welcome trend toward increased corporate giving for higher education. Cleveland has pioneered in the 1 per cent plan. More companies should act on the belief, supported by the courts, that they have an interest in the strength of higher education and in the quality of instruction and research whether or not they can see direct benefits to their employees or to their particular industrial or commercial interests.

Individual donors also will have to carry an increasing burden if Case Western Reserve is to prosper. Individual major gifts can no longer bulk as large in meeting university needs as did, for example, John D. Rockefeller's support of the University of Chicago. But the habit of giving to higher education is established, and individual gifts are increasing. Half the money individually given to education comes from people with incomes less than \$50,000 per year. Clevelanders should support their institutions of higher education if they want to achieve the rank in educational accomplishment to match what has been done in music, art, and welfare activities.

External support for research and training projects, particularly from federal resources, is likely to continue to grow and to flow into fields such as the humanities and the arts which until now have had little such support. This is a welcome trend. Such external help should not, however, be considered in any sense an alternative to other sources of funds.

The University requires other resources, in the interest of the quality and balance of its programs and its fundamental independence. The Trustees, administration, and faculty of the University and the Commission all, of course, recognize the constructive importance and indeed the necessity of support for higher education from federal sources. At the same time, responsible leadership within the universities and the federal government recognizes the need to keep federal support in harmony with the American tradition of freedom, pluralism, and diversity in higher education. Such a harmony can only be achieved and maintained if adequate funds from other sources continue to flow to the universities. Short-run problems may also arise. At any given time, the immediate concerns of federal governmental policy may lead to an emphasis on particular fields that could tend to distort the balance of University activity if compensatory resources are not also available. In sum, both long-run and short-

run factors make an increasing flow of financial support to higher education from non-governmental sources indispensable.

State support of private higher education has been growing. In 1964-65 twenty-four states had programs of direct support for students and seven states provided direct support in other forms.

In Ohio, the State Board of Regents, in its Master Plan for State Policy in Higher Education, has proposed that the state inaugurate a tuition-equalization program for full-time Ohio students who enroll in accredited privately sponsored colleges and universities offering baccalaureate programs. An implementing bill is now before the Ohio legislature. The plan would relate the tuition grants to family income. It would provide modest support in terms both of what an individual student might receive and in the total cost it would represent to the state budget.

This plan seems to us sound in principle. The state does have an interest in the education of its students in private institutions. The plan would help those who need help the most. It would help the private universities by increasing the total funds for student support available to them, or by releasing to other uses some of the funds they now have for this purpose. The state profits greatly from the educational capacity provided by private institutions, and the kind of support proposed in this plan would be far cheaper for the state than providing equivalent capacity directly in state-administered institutions. In fact, we wonder why the principle should not be extended to provide help to graduate as well as undergraduate students, having in mind the high economic and other benefits graduate work produces for the state.

The Regents have also proposed that the state might help private institutions to expand their physical facilities to accommodate more students, perhaps by building college and university buildings to be leased to the private institutions concerned. This plan too would enable the state to profit from increased educational capacity at a cost to the state much less than it would incur in providing the capacity directly in state-sponsored institutions.

Such state support to private institutions is best considered as supplementary to, rather than substituting for, direct appropriations for the state universities. We hope that the Ohio Board of Regents' plan can be accepted by the State Legislature. We also hope that the levels of individual support under the tuition equalization program can be increased in time beyond the extremely modest beginnings proposed in the Regents' plan.

The Future of Case Western Reserve University

Development

The University, if it is to achieve the excellence to which it aspires, will need resources of a magnitude hitherto unavailable to it. That means a heavy burden will rest upon its development program. The responsibility rests finally on the Trustees, Overseers, and the President and Chancellor. There can be no substitute for their resolve to increase the University's resources and their energetic engagement in the effort.

They will, however, need major help. For one thing, it might be wise to place heavier responsibility than has until now been the general rule on the several component units to raise their own funds. Complete decentralization, however, would go too far. There is a need here for overall University guidelines and supervision to ensure that the various departments in the school do not engage in undisciplined competition for the same resources and a continuing requirement also for central, professional fundraising services. No one, however, can know better than a Dean or a department chairman where support in his own field is likely to be found and no one is better qualified to make the case for obtaining support. The Deans and department heads should be encouraged to participate in the effort and to think of the visiting committees of the Board of Overseers as an important asset in the search for funds.

A_{lumni}

The alumni body of the University—now numbering about 55,000 and likely to increase at the rate of 1,500 to 2,000 per year—

constitutes an important resource. The alumni are a source of direct financial help. Their continuing interest and commitment to the University's goals can be a constant source of stimulus and encouragement. Their access to the organizational networks of which they are parts can influence the public image of the University in ways which bear directly on the support the University can obtain. An active alumni body soundly organized, well led, and participating in the affairs of the University is, therefore, a most important objective to be pursued. Vigorous attention should be given soon to building local and regional alumni clubs and enlisting the interest of present students in their future roles as alumni. The national alumni network should be seen as a means for enabling alumni to participate in continuing education programs provided by the University.

In the longer run, the alumni should be organized either in a single national body to which individual alumni belong or in a strong federation of the several alumni bodies. One means of invigorating alumni interest and helping to build a strong alumni organization is to arrange for direct election of alumni Overseers. It is important that the alumni program be regarded as a responsibility of the University, which should pay the costs of the program out of its general resources. Funds raised by the alumni organization should be regarded as funds of the University.

A Vision of the Future

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On July 1, 1967, Case Western Reserve University will embark on an adventure in higher education without precedent. While this report has emphasized University needs, opportunities, and sometimes its unfinished business, let no one doubt that this Commission believes that the complex, ambitious job of producing a great private university in Cleveland is worth doing, and that it can and will be done.

The educational map of the nation points to the desirability of a distinguished center of learning here. Leaders from this community and elsewhere have made plain their eagerness to see it accomplished, both through direct expressions of support and through inquiries about the Commission's work.

In the past year, we have become optimistic about the federated University's chances for success. It is composed of two going concerns. It begins with a wealth of human resources, impressive physical assets, and a fine record of achievement by its components. It is located in the heart of the great University Circle cultural center. It is in a city, which, whatever its temporary discouragements, has a long tradition of civic progressiveness and leadership. It has a broad industrial and business com-

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munity to look to for support. Beyond all these assets is the need of the time itself. America is aware as never before of the importance of education to improve the quality of the society and to enrich the life of the individual as well as to maintain the nation's material progress. These assets and needs will come together, we are convinced, to make real in Cleveland the vision of a great university that is shared by so many and that has inspired us.

We are enthusiastic about the prospects for Case Western Reserve University. We call for enthusiasm from all those with a part to play in its future.



Appendix

${f B}_{ m iographies}$ of Case-W.R.U. Study Commission

Henry T. Heald, Chairman of the Commission, was from 1956 until 1966 President of the Ford Foundation. Now he is with Heald, Hobson and Associates, advisors to educational institutions, research institutes, and other non-profit organizations. In his career as an educator, he has been President of Illinois Institute of Technology, Chancellor and later President of New York University. He also served as chairman of the Governor's Commission to study higher education in New York.

He has been President of the American Society for Engineering Education, President of the Western Society of Engineers, President of the Association of Urban Universities, and Chairman of the American Council on Education. He has received twenty-one honorary degrees and serves on the Boards of four major corporations.

Charles W. Cole began his teaching career as an instructor in history at Columbia University, went to Amherst in 1935 as an associate professor of economics, and became George D. Olds Professor in 1937. He returned to Columbia University as professor of history in 1940, where he remained until 1946 when he was elected President of Amherst College, an office he held until

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1960. In 1961 he was appointed U.S. Ambassador to Chile, where he served until recently.

Harold L. Hazen began his teaching career in electrical engineering at the Massachusetts Institute of Technology. From 1938 to 1952 he served as chairman of M.I.T.'s Electrical Engineering Department and became Dean of the Graduate School in 1952. He served as a consultant on engineering education to Robert College of Istanbul in 1955, and he was President of Robert College for a year in 1961. He is a Trustee of Robert College and of the College of Petroleum and Minerals, Dhahram, Saudi Arabia. He also has been consultant on engineering education to the American University of Beirut, the Ministry of Education of Iceland, and the UN Mission to the University of Brasilia, and was chairman of the Engineering Education Mission to Japan. He was awarded the Levy Medal of Franklin Institute in 1935 and the Lamme Gold Medal by the American Society of Engineering Education.

Milton Katz is the Henry L. Stimson Professor of Law and Director, International Legal Studies at Harvard Law School. He is also a member of the University Committee on International Studies at Harvard, and a member of the Faculty Committees for the Center of Regional Studies, the Middle East Research Center, and the Development Advisory Service. He has served the United States government as the U.S. Special Representative in Europe (chief in Europe of the Marshall Plan) with the rank of Ambassador, as chairman of the Finance and Economic Committee of NATO, and as chief of the U.S. Delegation to the Economic Commission for Europe. His most recent publication is The Things That Are Caesar's (1966).

David A. Shepard began his business career in 1927 with the Standard Oil Company of New Jersey, which he subsequently represented in Paris and London. He was appointed petroleum attaché to the U.S. Embassy in London, where he served for one year, after which he became the shareholders' representative of the Standard Oil Company of New Jersey in London. From 1945 to 1949 he was chairman of the Board of Anglo American Oil Company Ltd. in London and he returned to the Standard Oil Company of New Jersey as an executive assistant to the President. He retired in 1966 from his position of Executive Vice Pres-

ident of the Standard Oil Company of New Jersey. He is chairman of the Board of Trustees of the Rand Corporation, chairman of the Executive Committee of the Board of Trustees of Carnegie Corporation of New York, and a member of the Corporation of Massachusetts Institute of Technology.

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S_{taff}

Lawrence S. Finkelstein, Director Arnold H. Berger, Assistant Director Jean S. Calhoun, Senior Associate Jean M. Radcliffe, Secretary of the Commission

$S_{ m upporting Staff}$

Martha Andrews (May-October) Larry Murphy (June-September) Evelyn Balcerzak Roberta Kosser

Beverly Robbins (October-April) Judith Warren (June-October)

Consultants were appointed to study the following departments:

*Anthropology

Dr. John W. Bennett, Washington University, St. Louis

Dr. Sol Tax, University of Chicago

*Art History

Dr. John McCoubrey, University of Pennsylvania

Dr. Joseph Sloane, University of North Carolina

Chemistry

Dr. Frank Cotton, Massachusetts Institute of Technology

Dr. Walter Kauzmann, Princeton University

Dr. John Roberts, California Institute of Technology

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*English

Dr. John Hurt Fisher, Modern Language Association of America Dean H. Bunker Wright, Miami University

*German

Dr. Eli Sobel, U.C.L.A.

Dr. Theodore Ziolkowski, Princeton University

Libraries

Dr. Warren Boes, Syracuse University Library

Frederick G. Kilgour, Yale University Library

Dr. G. Flint Purdy, Wayne State University Library

Dr. Frederick Wagman, University of Michigan Library

Mathematics

Dean A. A. Albert, University of Chicago

Dr. William Feller, Princeton University

Dr. P. R. Halmos, University of Michigan

Dr. W. T. Martin, Massachusetts Institute of Technology

*Music

Dr. Allen Britton, University of Michigan

Dr. William Doty, University of Texas

*Religion

Dr. Walter Harrelson, Vanderbilt University

Dr. Franklin Young, Princeton University

Studies Prepared for the Commission

An Inventory of Social and Behavioral Sciences at Western Reserve University and Case Institute of Technology—Professor William R. Rosengren (W.R.U.) and Professor Chadwick J. Haberstroh (Case).

A Survey of University Circle Institutions—Facts on File, Inc. (Mrs. Joanne Kaufman).

Various fiscal and budget analyses—Ernst & Ernst.

Legal questions of federation—Jones, Day, Cockley & Reavis (Mr. Arthur Dougan).

^{*}These consultants were appointed by the University's Coordinators for Humanities and Arts and Social Sciences. Their visits were paid for from Commission funds.

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