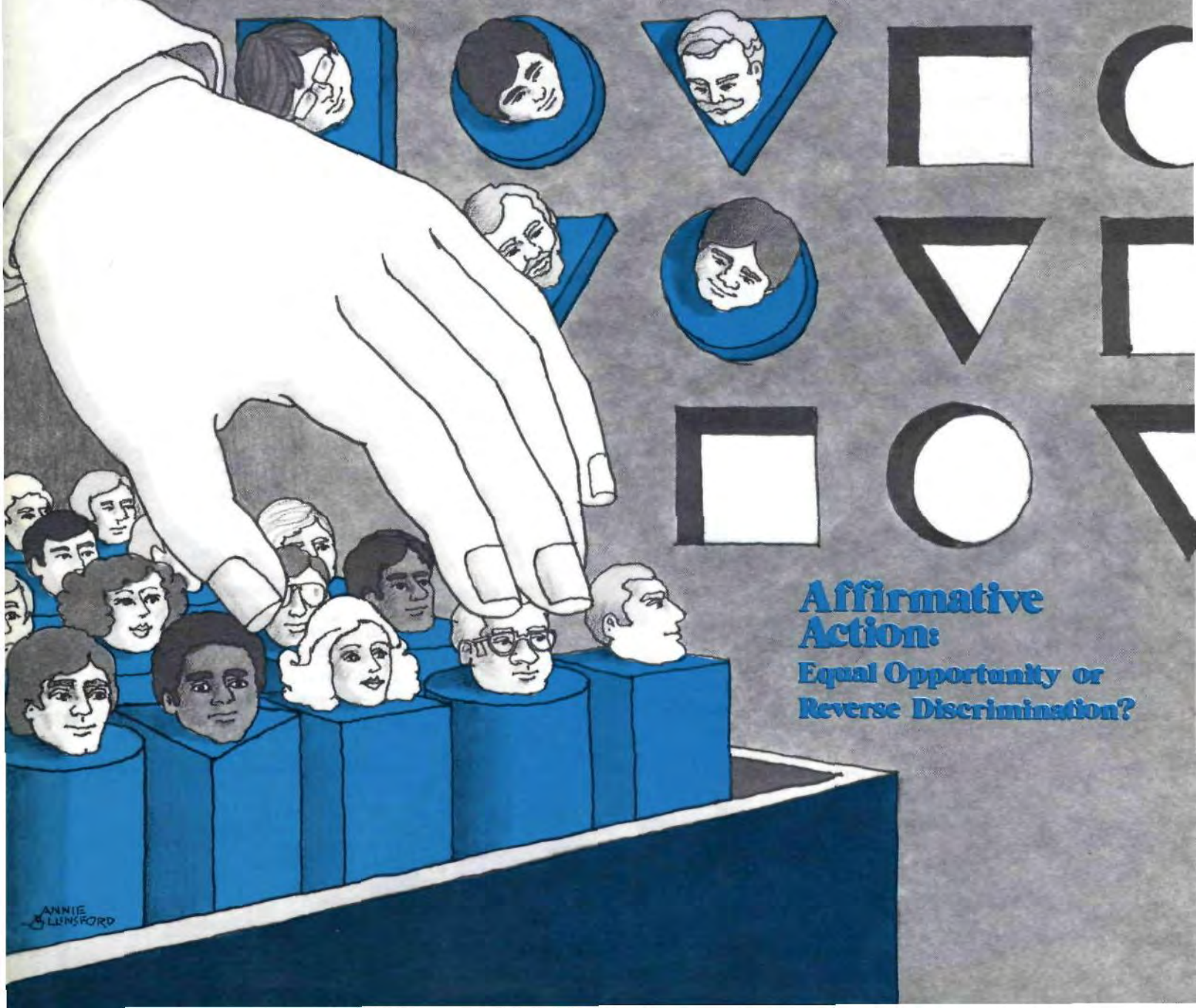


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# JOURNAL OF OPTOMETRIC EDUCATION

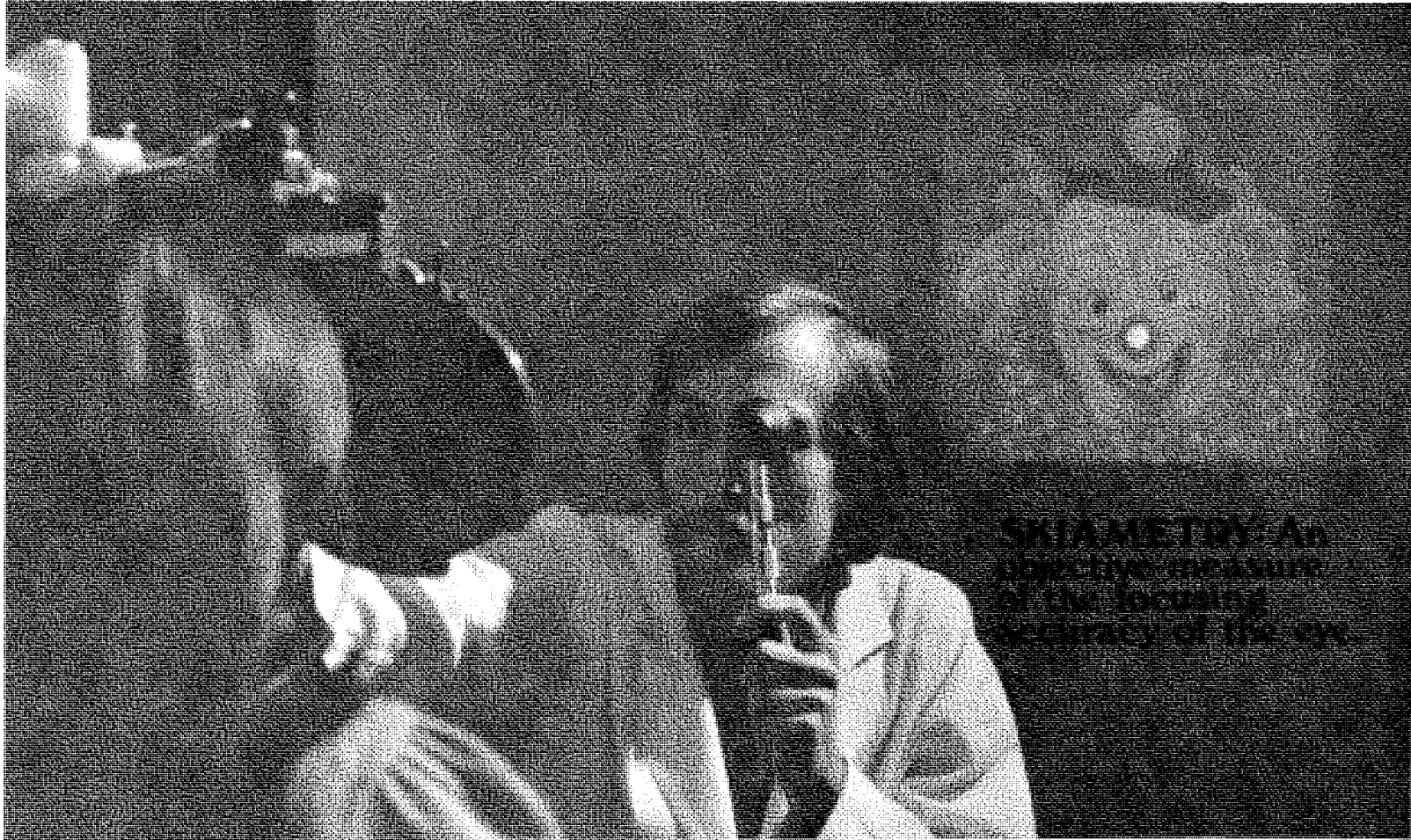
Volume 1, Number 2  
Spring, 1975

## SCHOOL OF OPTOMETRY FACULTY OPENINGS



**Affirmative  
Action:**  
Equal Opportunity or  
Reverse Discrimination?





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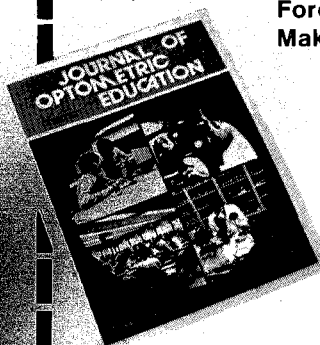
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# JOURNAL OF OPTOMETRIC EDUCATION

Volume 1, Number 2  
Spring, 1975

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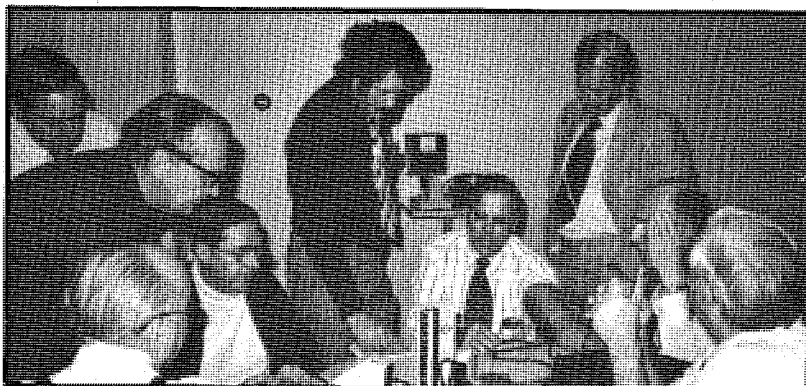
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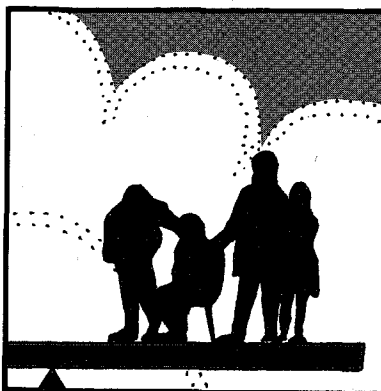
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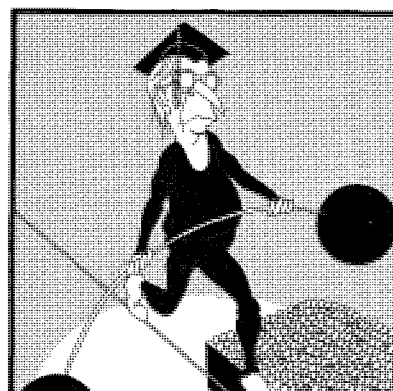
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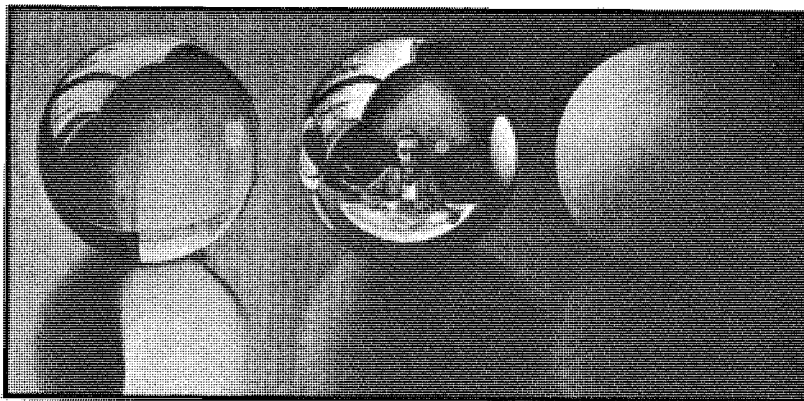
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The **JOURNAL OF OPTOMETRIC EDUCATION** is published by the Association of Schools and Colleges of Optometry. (ASCO). **Managing Editor:** Louis A. Ebersold. **Associate Editor:** Barbara J. Harrelson. **Art Director:** Roger Kranz. **Contributing Editor:** Sheila Doctors. **Editorial Assistant:** Cindy J. Simms. Business and editorial offices are located at 1730 M Street, N.W., Suite 411, Washington, D.C. 20036. **Subscriptions:** **JOE** is published quarterly and distributed at no charge to dues-paying members of ASCO. Individual subscriptions are available at \$10.00 per year, \$15.00 per year to foreign subscribers. Postage paid for a non-profit, tax-exempt organization at Washington, D.C. Copyright® 1975 by The Association of Schools and Colleges of Optometry. Advertising rates are available upon request.

# Stop, Look, Listen.

Although many accept the fact with mixed emotions, it is increasingly apparent that optometry's development is significantly affected by many influences outside of the profession. Not too long ago, it seems, our professional leaders could decide upon a particular course of action and then proceed to implement it. It is not quite that simple anymore. Optometry, like all health professions, is being increasingly influenced by state and federal laws as well as changing concepts of health care delivery . . . As educators and health professionals, we must be concerned about these external influences. If we keep our heads in the sand and refuse to recognize what's happening in the "real world," we will not meet our responsibilities to the students—or to society. Unless students are aware of these influences while they are students, they will not be responsive as practitioners . . . This issue of the JOURNAL considers several aspects of outside influence which can make us look at our educational programs in a new light: Francis Young, a researcher in vision and close friend of the profession for many years, presents some ideas about early detection of health problems that have significance for the future scope of optometric practice and, therefore, for optometric education . . . ASCO President William Baldwin, with acknowledged expertise in futuristic planning, takes a long look at current directions in optometric education and reports some specific recommendations regarding the education of tomorrow's optometrists . . . Thomas Mou, a physician/educator/administrator with responsibility for all professional health sciences education at the largest university in the world, gives a candid, optimistic and personal view of the current trends in optometric education—as influenced by other disciplines . . . Kenneth Myers, the first Director of Optometry of the Veterans Administration, describes opportunities for optometric educational affiliations to be developed with the largest independent federal agency . . . Floyd Williams, a young faculty member working in another area that holds great potential for the future of the profession, writes about the counseling of parents of children that optometrists examine and treat . . . Sheila Doctors, of the National Office editorial staff, discusses affirmative action in equal employment opportunity as another external influence that can shape the future of the profession . . . As educators, students and practitioners, we have a responsibility to understand these outside influences. Only by understanding them more completely can we determine to work *with* needed changes for the ultimate benefit of the public. With increasing knowledge of the forces affecting optometric education will come greater capability for service and professional development.

**by Norman E. Wallis**  
**Chairman, Editorial Council**

# AUTHORS

Coming out with a new magazine such as the *Journal of Optometric Education (JOE)* is never an easy task, so when the first issue appeared last winter, many people were surprised and elated to see it happen. The happiest people were those connected with **JOE**, the writers, the editorial council and especially the editors. As you can see from some of the letters on page 83, our readers were also very pleased with the first issue.

But once the jubilation died down, we went back to work on our second issue, which after much time and hard work, is now in your hands. We are very pleased with it and hope you will be too. We will be happy to hear your views and comments on this issue.

Before we began on the first issue, one of our greatest fears was not having enough copy for a full-fledged scholarly journal. Luckily our fears were not founded, for we have received many good articles and papers, making our editing difficult. As you can see, we have had contributions from nine different ASCO member institutions (including six deans or presidents), one federal agency, one research center, as well as articles written by our own staff in Washington.

While we have been pleased with contributions so far, we are anxious to receive more articles from more of you. We are looking for articles of all types, from research papers to human interest stories. Thus far, **JOE** articles have ranged from the general to the specific, traditional to futuristic, predictable to the revealing—all of which emphasize the idea that **JOE** is a forum for an exchange of ideas and opinions relevant to all facets of optometric education. We hope that you will send us something soon.

And now to introduce those that have contributed to this issue. Working with us since last Fall has been **Roger Kranz**, a young, professional graphic arts consultant who has designed **JOE** and helped make it an original and innovative journal. Roger is from Washington, DC and has been involved in publications for five years, sandwiching in a B.A. in journalism at Rutgers College and a M.A. in Communications at American University.

Working with Roger to make **JOE** interesting to look at as well as to read have been two Washingtonian freelance artists, **Chuck Steacy** and **Annie Lundsford**.

**Francis Young**, a researcher studying the development of myopia in primates, teaches psychology at Washington State University in Pullman, Washington. Although Dr. Young is not an optometrist (Ph.D., psychology, Ohio State U.), he has been a fellow of the American Academy of Optometry for 27 years and last year served as a visiting professor of ophthalmology at the University of Oregon's medical school in Portland.

**Kenneth Myers** was appointed last July as the first Director of Optometry of the Veteran's Ad-

ministration's Department of Medicine and Surgery. Dr. Myers, with an O.D. from Massachusetts College of Optometry, became interested in physiological optics and psychophysics while a doctoral candidate in nuclear physics. He holds B.S.E.E. and B.Sc. degrees from the University of Akron, as well as M.Sc. and Ph.D. (biophysics) degrees from Ohio State University. In addition, he has taught at the OSU College of Optometry, MCO and was recently named adjunct assistant professor at the Pennsylvania College of Optometry.

**Sheila Doctors**, a native of New York City, attended Brooklyn College, City University of New York where she earned a B.A. degree in English. Ms. Doctors taught high school English in New York for several years before coming to Washington, D.C. She has written professionally for the past four years on health and education topics—first, for the federal government, then, for a private, non-profit drug abuse research organization, and most recently, as editor of the "**ASCO Educator**," the monthly membership newsletter.

**Frederick Hebbard** assumed the leadership of the Ohio State University School of Optometry in 1966 and was named dean when the College of Optometry status was designated in 1968. Well-known by his colleagues as a serious scholar and able administrator, Dr. Hebbard was formerly president of the NBEO, 1964-74. Dr. Hebbard earned both his O.D. and Ph.D. (physiological optics) degrees at the University of California School of Optometry, Berkeley. He is a member of the AOA and a fellow of the American Academy of Optometry.

**William Baldwin**, the outgoing ASCO president, has distinguished himself as an articulate spokesman for optometric education concerns. His professional activities include participation in the New England Board of Higher Education, as well as leadership positions in the AOA, American Optometric Foundation and the Optometric Research Institute, Inc. He has been president of the Massachusetts College of Optometry since 1969, previously having served as dean of Pacific University's College of Optometry for six years.

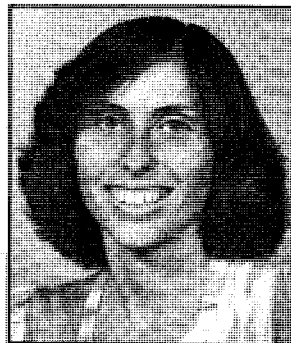
**J. Floyd Williams** joined the faculty of his alma mater, University of Houston's College of Optometry, in 1971, after receiving his O.D. degree. He became Chief of HCO's Vision Therapy Services a year later and was named assistant professor of optometry in 1973. He is currently engaged in study towards an advanced degree, as well as clinical research. With the support of an Optometric Extension Program Foundation Grant, Dr. Williams will be devoting all his time this summer to the study of clinical vision development profiles of disabled learners.

Again, we hope you enjoy this issue of **JOE** and we look forward to hearing from you about it.

The Editors



Francis Young



Sheila Doctors

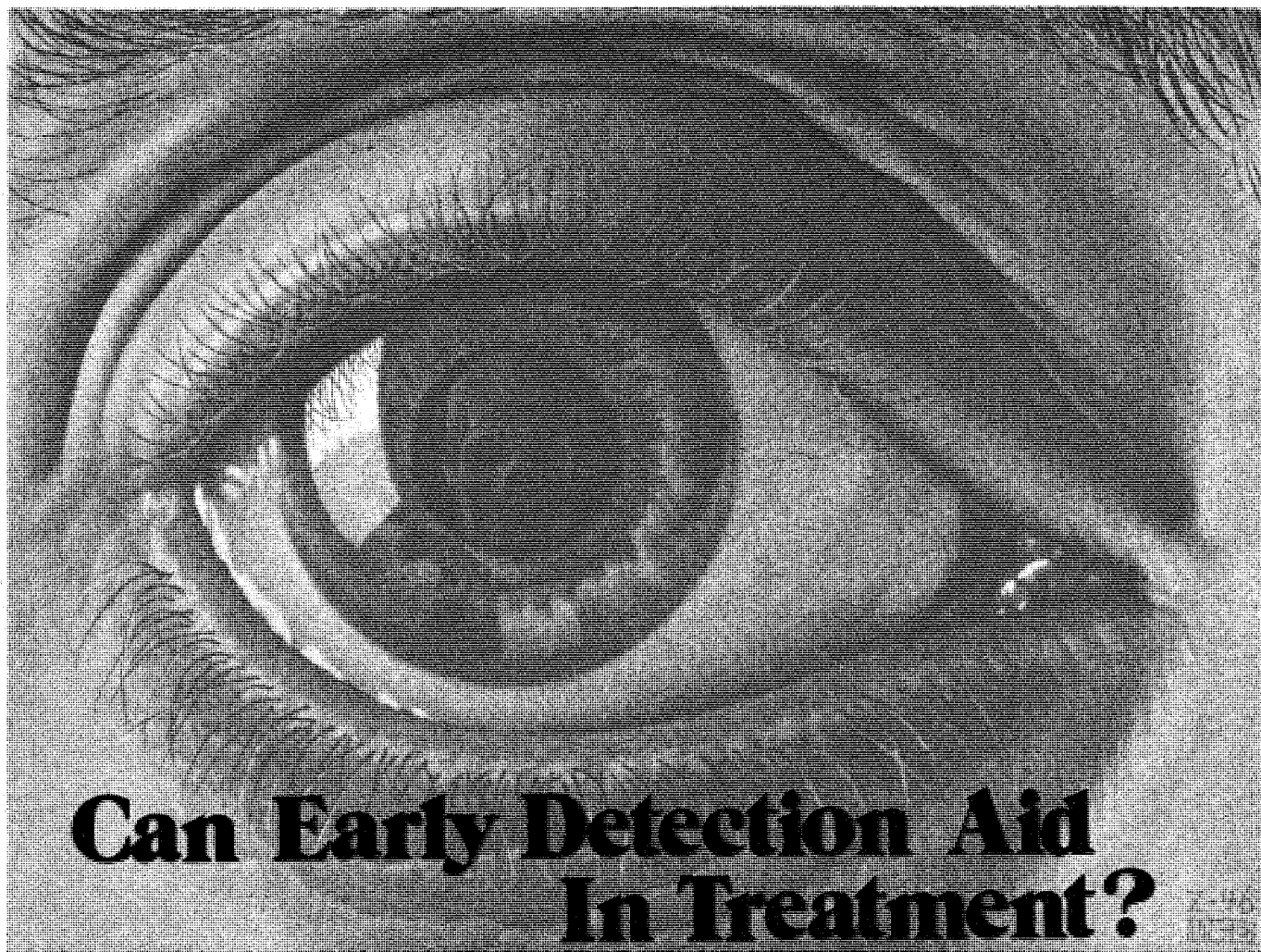


Frederick Hebbard



J. Floyd Williams





# Can Early Detection Aid In Treatment?

by Francis A. Young

The old adage, "a stitch in time saves nine," applies equally well to the tailor, the automobile mechanic, or the human mechanic (health care practitioner). In each case, the early detection of a difficulty—whether it be a loose thread, an engine knock, or high blood pressure—combined with the application of appropriate treatment will go a long way toward keeping the coat, the car, and the human in good condition, at a

minimum expenditure of time and energy.

The operation of this adage depends upon early detection of the difficulty or irregularity. This task relies on, to a great extent, the capabilities of the perceptive person—one who knows the subject well and is able to detect irregularities at the outset.

In the case of the automobile, it is essential that the person in closest contact with the automobile be in a position to notice the new sound which did not exist before and to respond to this new sound by seeking a diagnosis of the nature and cause of this sound. Thus, the owner of the car must have a sufficient awareness of the nature of

the operation of the car to detect when it is not as it should be, even though he may not know what is wrong or why it is wrong.

In the case of the human body, the owner of the body again must be in a position to make a judgment as to when the operation of the body is not as it should be and to seek assistance when he detects this malfunction. Unfortunately, in the case of high blood pressure, he may not be able to detect the malfunction until the symptoms are severe enough to cause serious problems.

If early maintenance is not applied in either of these instances, the lack of correction will add to the stress of other parts of the

---

*Dr. Young is director of the Primate Research Center, Washington State University (Pullman, Wash.).*

mechanism and can result in further malfunction. As has been stressed many times, early diagnosis of human illness or malfunction greatly improves the chance of adequate treatment being carried out. Late detection permits widespread distribution of the damaging agent—especially in cases of cancer—and will make it virtually impossible to bring about any type of cure. Additional benefits from early detection and proper treatment of illness would appear to be fewer days lost from illness, more effective treatment of illness, and less time and money required for treatment.

Early detection and early diagnosis are certainly not new to health practitioners. However, the concepts of *preventive medicine* and *treating "the whole person"* (promoting general well-being instead of treating only specific complaints) represent some innovation in established forms of health care delivery. The following observation by Dr. Roger O. Egeberg and LeRoy A. Pesch (chairman and co-chairman of the HEW Secretary's Committee to Study the Extended Roles for Nurses) emphasizes this fact:

**It has been said that biomedical science has advanced further in the last three decades than in all prior history. Certainly providers of health services now have access to knowledge, skills and resources sufficient to deal effectively with problems that not many years ago defied solution. While the effect of this progress can be measured in improved health, it is also reflected in increasing complexity in the organization and delivery of health services. And equally important, progress in biomedical technology has not been matched by a necessary change in the underlying philosophy of the provision of health care. Our system is still largely operating on the hippocratic principle that the doctor or nurse must wait until the patient seeks help before they set about to minister to his needs. Despite some limited efforts to the contrary, the health care system still operates on a "come and get it" basis. Yet some of the greatest advances in the health field, especially in the areas of disease prevention and health maintenance, depend upon the health care delivery system reaching out to those people who do not see the need or lack the opportunity to "come and get it."**

And further, they comment:

**Health care in its entirety from the viewpoint of providers and consumers alike is the sum total of care rendered by all disciplines. It comprises more than diagnosis treatment and rehabilitation associated with acute and chronic illness; it includes health education, health maintenance, prevention and early case finding. It involves giving the public a voice in the design and operation of health systems and the allocation of health forces to meet changing demands. Any such health care is not the province of any one profession, nor does it lend itself to delivery through a rigid professional hierarchy.<sup>1</sup>**

As Dr. Egeberg points out, medicine is still operating on the "come and get it" basis. Thus, it is essential that the patient make the original diagnosis himself: that he somehow doesn't feel as well as he should feel, or that something hurts in his head, or that he has a pain in his shoulder, or that any number of changes have occurred which suggest to him that he should see a physician. The ability of a patient to make this preliminary diagnosis will greatly depend upon his level of intelligence and experience as well as education available to the individual. Clearly, an individual who has been given a course in health education will be more aware of the nature of some of his symptoms than will an individual who has had no such educational opportunity. Since relatively few individuals in our present society are sophisticated enough to carry out a meaningful interpretation of whatever is causing their symptoms, the concept of early detection of illness is unlikely to be applied effectively in our society.

#### **Access to Medical Care**

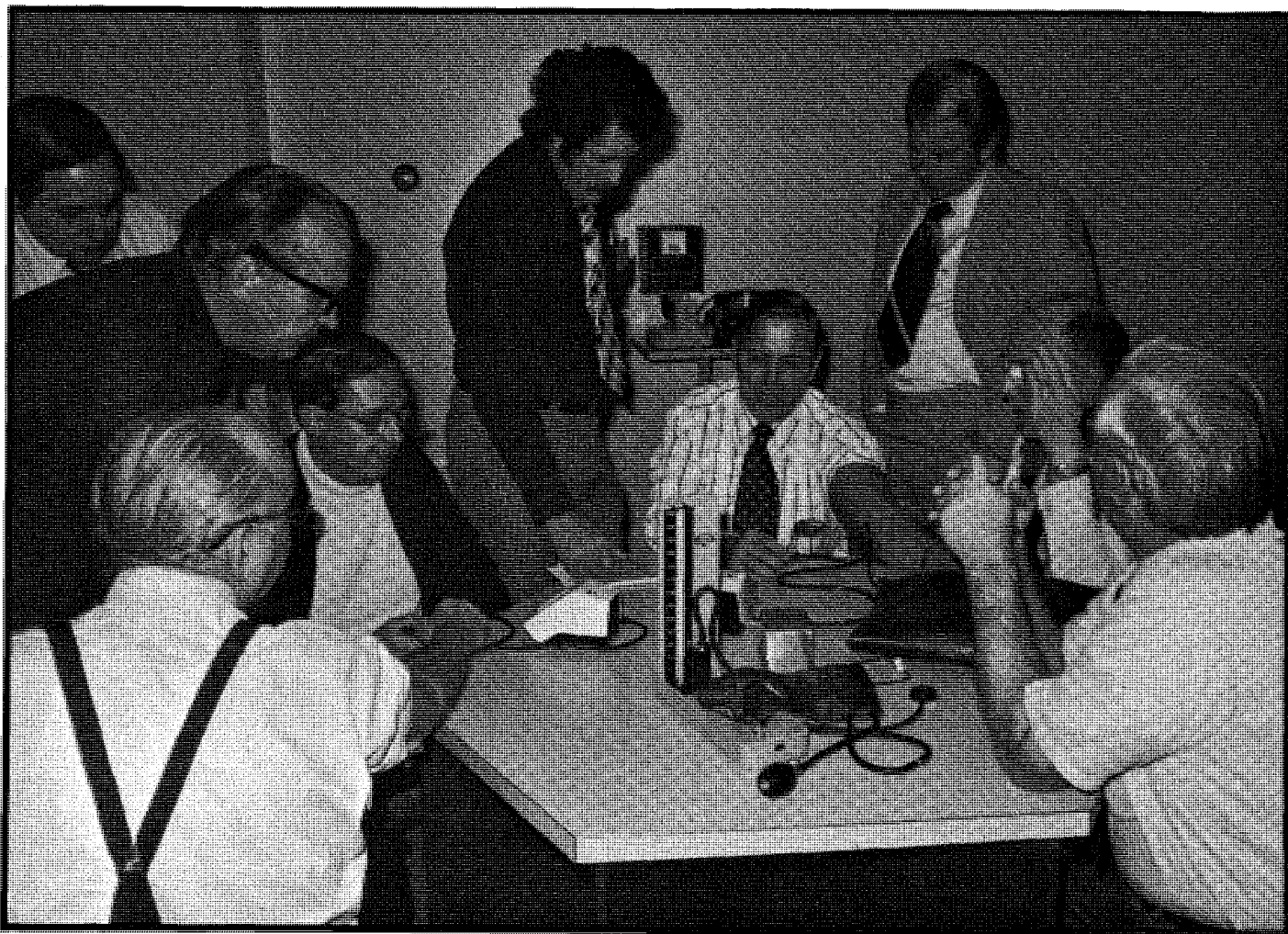
But even if the person is capable of deciding that something is wrong and has some concept as to what might be wrong, he is likely to have considerable difficulty in finding a physician who is willing to work with him in attempting to carry out a more accurate diagnosis and to institute a program of treatment.

*Moneysworth*, a Consumer's Newsletter, recently sent out an ad<sup>2</sup> for its *Home Medical Advisor* which is intended to provide some basis for diagnosing illness. Their ad reported that: (a) over 20,000

Americans are dying each year of a virulent new malady called "Doctoritis" which is caused by the inability to get hold of a doctor when you need one; (b) a study by the United States Senate indicates that America should have 600,000 doctors, while we have fewer than half that many at the present time; (c) since more and more doctors are refusing to make house calls or to work at night and on weekends, hospital emergency rooms are being overrun with non-emergency cases. ("We've simply become a substitute for the family doctor," says the head of emergency service at New York's Roosevelt Hospital); (d) in some communities a doctor is not available at any time. (The *Wall Street Journal* reports patients in some localities must plead with up to half a dozen doctors before they can find one willing to treat them, while the governor of Texas states that fifteen counties in western Texas have no doctor at all), and finally, (e) a study by the Brookings Institute indicates that by 1975, due to the pressure of Medicare, Medicaid and the population explosion, Americans will require *one billion* doctor visits. There simply will not be enough medical manpower to meet this need.

The changes which have occurred in medicine in recent years make it almost impossible in many locations to obtain medical treatment. This is particularly true with the decrease in the number of general practitioners and the inadequate increase in the number of internists. An editorial by Ladd Hamilton in an Idaho newspaper, the *Lewiston Morning Tribune*<sup>3</sup>, complains that "The average American has less access to good medical care at reasonable cost than the average European. The reason is that the best doctor in the world can't do the patient much good if the patient can't get in to see him."

The maldistribution of health services in many parts of this country is a scandal. One writer pointed out recently there are more physicians in one building in the affluent loop-section of Chicago than in several square miles of the same city's black ghetto. Health services in the United States are good, but they are uneven, the pattern being



Detection of hypertension is taught to practicing optometrists in continuing education courses like this one at Southern College of Optometry.

determined by the distribution of personal wealth.

### Specialization Trend

If one compares the membership of the American Medical Association in 1950 with the population of the United States in that year, one finds that there was one member physician for every 1,098 persons. Assuming that the same proportion of M.D.'s are members of the American Medical Association in 1970 as in 1950 (this may be questionable since the AMA appears to be losing membership), one finds that there is one member physician in 1970 for every 912 persons. Thus, it would appear that there is an increase in the ratio of physicians to persons in the United States. However, this relationship is misleading. For example, in 1972, there were 973 physicians listed in the Yellow Pages of the Portland, Oregon telephone directory. Of these 973 physicians, only 241 (or

approximately 25%) are general practitioners, and another 149 (or 15%) are specialists in internal medicine. If these two groups are lumped together, then 40% of the physicians in Portland, Oregon would be deliverers of primary health care.

By contrast, in 1950, approximately 60% of the members of the American Medical Association were in general practice or internal medicine. Thus, the ratio of primary health care personnel to population was 1 to 1829 in 1950, and dropped to 1 to 2280 in 1970.

In spite of monies provided to increase the number of general practitioners trained, the medical schools are turning out more and more specialists and fewer general practitioners. From the medical student's point of view, there is little but social service to reinforce becoming a general practitioner and much more in the way of income, pleasant working hours, in-

fluence and status as incentives toward specialization. Most students who enter medical schools are motivated by one or more of the above. Therefore, they cannot be expected to desire to enter general practice or to establish a practice in a small community.

The tendency of physicians to congregate in large cities is fairly obvious when one compares Portland, Oregon with 375,000 people and one physician to every 386 persons; Spokane, Washington with 168,654 persons and one physician to every 429 persons; Pullman, Washington with 20,384 persons and one physician to every 1,073 persons; Moscow, Idaho with 13,731 people and one physician to every 1,373 persons, and Moses Lake, Washington with 10,164 people and, at last indication, no physicians at all.

With a situation such as this facing American medicine, and no apparent hope of remedying the



situation for at least a decade, a significant move toward a nationwide health plan will presumably overload the present medical care system. Many people may find it impossible to obtain the type of medical care to which they are accustomed and it may become even more difficult for some to obtain any medical care at all.

### **Federal Health Planning**

The direction of thinking at the present time with respect to national health care plans under consideration by Congress seems to have polarized in two directions. One faction supports the development of the health maintenance organizations (HMO's) such as the Kaiser-Permanente Foundation or the Group Health Organization in Seattle, Washington. The HMO agrees to provide comprehensive health care to all members in a household unit under one umbrella, for a fixed monthly payment.

Under the HMO system, the practitioner becomes a partner or shareholder in the organization and receives a salary plus dividends or a bonus from the organization. He works on a regular schedule in conjunction with a number of other colleagues and members of supporting and related professions to deliver a large amount of health care supposedly more effectively to a large number of people. (The Seattle Group Health presently has over 150,000 persons enrolled in this type of program.)

The other approach favored by federal lawmakers is to increase the efficiency of the solo practitioner through development of supporting personnel, as well as increase utilization of diagnostic tools and treatment equipment. Frequently the individual physician may join with a group of other health care professionals to form a clinic, thus reducing the cost of diagnostic equipment and supporting personnel by sharing expenses. In this situation, however, each provider still works on a fee-for-service basis, with no attempt to utilize the general prepayment concept of the HMO. The patient, of course, may subscribe to any number of health insurance plans to help pay for medical expenses.

Both of these proposed health

care delivery plans focus on the physician as the primary provider of health services, with other practitioners included in some variations. However, the current supply of general practitioner M.D.s is presumably insufficient to meet the demands for primary care under a national health program. Obviously, some alternatives must be found to meet growing national health needs.

### **Emphasis on Early Diagnosis**

One solution is to emphasize the diagnostic skills and early detection practices for which many health professionals, besides physicians, receive training. Dentists, optometrists, podiatrists, public health nurses and others receive much the same early health sciences training that physicians do. In addition, these health care providers are all experienced in patient care. If certain early diagnostic procedures were stressed more in clinical aspects of these health professionals' education, then more of them could function more effectively as providers of primary health care, as their training and licensure allows. Such measures could significantly reduce the magnitude of health care delivery problems that must be met.

Optometrists and other health practitioners could offer expanded services if they were taught to recognize common diagnostic signs which accompany the more common and prevalent diseases. They would thus serve a screening function and locate persons who show signs of a variety of diseases which may not, as yet, manifest themselves to the patient. Such screening would assist the patient's entry into the health care delivery system at a point and a place which would provide effective and prompt preventive service. For example, dentists and their assistants, in many parts of the country, are routinely taking blood pressure measurements on their patients to assist in the detection of high blood pressure, a disease condition which does not readily manifest itself to the person involved. If the development of a variety of disease conditions could be prevented by early diagnosis through the use of common signs,

many more persons could be treated more effectively with the number of M.D.'s currently available.

Since these practitioners are not trained as M.D.'s, they would not be able to make the final diagnosis or carry out the treatment, but they could help the individual patient determine whether he needs treatment and what type of treatment he needs. With a proper system of referrals to medical practitioners, these health care providers could help direct the patient to the proper specialist.

The use of such preliminary screening techniques will undoubtedly result in a number of false referrals, although the number of false referrals should actually be less than would be the case if the individual referred himself to a specialist. Since these referrals would probably bypass the general practitioners (who are in particularly short supply and high demand), it is unlikely that these false referrals would result in any serious disruption of the present health care delivery system.

By improvement of training and better cooperation between the medical profession and the other health care professions, the diagnostic ability of all primary care providers could be improved and the number of false referrals decreased. With the addition of course work and demonstration at the student level, it is likely that all of these health professional groups could achieve a satisfactory level of knowledge which would provide the type of screening discussed. This background could be most effectively imparted by basic science personnel and by clinical instructors in an integrated health-science-oriented setting. For those health care providers currently in practice it might be possible to develop a series of short courses which could be provided as a program of continuing education to improve their ability to carry out these screening operations.

The educational implications of this approach to providing primary health care must be addressed by optometric educators, as well as their colleagues in the other health professions. It would seem that no drastic revision of curriculum would be needed if necessary at-

*Continued on page 90*

# Veterans' Administration:

## We Train Health Professionals

By Kenneth J. Myers

The Veterans Administration, the largest independent U.S. agency, operates, as part of its over-all responsibility for our country's veterans, the world's largest hospital/clinic system. To provide health care to eligible veterans the VA's Department of Medicine and Surgery (DM&S) administers and staffs a system of 172 Hospitals, 206 Outpatient Treatment Clinics, 87 Nursing Home Care Units, 18 Domiciliaries, 8 Cosmetic Restoration Centers, 3 Blind Rehabilitation Centers (plus 5 smaller psychiatric blind centers) and many other special programs and centers. To do all this, the VA utilizes the services of over 180,000 employees, approximately 60,000 of whom are physicians, dentists, nurses, pharmacists, optometrists, podiatrists, residents, interns, students, or members of supporting allied health care professions. Last year a budget of \$14 billion was required (Fiscal Year 1974) to operate the agency from which some \$3.5 billion was appropriated to support this hospital/clinic system. In the same period, the system treated and discharged well over 1 million in-hospital patients.

America now has over 29 million living veterans of its armed forces or 13% of the general population. In addition to the over 1 million in-hospital patients treated and discharged, the veteran population

produced 14 million visits to VA ambulatory or outpatient clinics (plus 2 million visits to private practitioners for fee-for-service in-office treatments) last year. Outpatient dental examinations were given to 227,000 veterans and 248,000 dental cases were completed. At the same time nursing home care was provided for an ever increasing number of World War II veterans (65 years of age or older) with 18,137 being cared for in the 87 VA nursing homes while 19,922 veterans were quartered at the 18 VA domiciliaries across the nation. Finally, over 25 million prescriptions were filled and dispensed during this same year.

The Department of Medicine and Surgery now maintains within this immense hospital/clinic system more than 1,200 other special medical clinics, programs, and centers. For example, veterans with impaired, or no sight, are cared for at the 3 Blind Rehabilitation Centers (BRC's) in San Francisco, Chicago, and West Haven, that together train over 400 "blind" veterans each year, while a network of vision impairment centers is under development. A screening network of 72 visiting and in-hospital Vision Impairment Services (VIS) Teams first identify, work with, counsel and, when needed, refer the visually impaired to these BRCs. Each year these VIS teams invite those blinded or sight-impaired veterans in their respective areas who are eligible for care to visit their hospital for an interview and counseling. The VA also maintains special restoration centers staffed by artists skilled in the

design and fitting of ocular-maxillofacial cosmetic and prosthetic devices.

As another example of the VA's diversity, several speciality centers are staffed and equipped for the treatment and care of spinal cord injury patients where a system of limb and orthotic shops is administered by a Prosthetic and Sensory Aids Program that is a long recognized world leader in devising and fitting artificial limbs, braces, adaptive equipment and sensory aids. Table I lists other special medical services and the number of operating units in each service.

In short, each modern VA hospital is composed of many special medical services and supporting units which makes the entire system of 172 hospitals and 206 outpatient clinics so diverse as to stagger one's imagination. It has thus long been clear to all the commissions that have studied the VA medical system over the years that the VA has, does, and will continue to play a large role in shaping American modes of health care and the training of its health care practitioners.

### VA Teaching Affiliations

By the same argument this article will show that an intimate and wholesome relation has long existed between the VA hospitals/clinics and our country's medical and allied health schools. This relationship, if only by its size, has done much to shape the present education programs at these schools. Both the VA hospitals and

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*Dr. Myers is Director of Optometry in the Department of Medicine and Surgery at the Veteran's Administration, Washington, D.C.*

the schools have greatly benefited from these teaching affiliations, and most allied and/or supporting health profession schools, except optometry's, have long taken part in these training affiliations.

Recent legislation has continued to spell out the VA's importance as a training facility of this country's health professionals. For example, the recent Public Law 92-541, The Veterans Administration Medical School Assistance and Health Manpower Training Act of 1972, established new programs of (1) grants to state-supported institutions to assist them in establishing up to eight new medical schools; (2) grants to existing affiliated medical schools to assist them in expanding and improving their capacity for educating medical students; and (3) grants to nonprofit universities, colleges and other institutions affiliated with or to become affiliated with the VA to assist them in expanding and improving their facilities for training professional or technical allied health personnel while, at the same time, enhancing care of the VA's patients.

The optometry schools have been eligible to apply for this direct VA Central Office funding under

section (3) since 1972 but to date only one school has so applied. These highly competitive grants run on a continuing year-to-year basis, can be renewed, and are given directly to the school. The deadline for the next cycle of applications is September 1, 1975, with approved programs to be activated on January 1, 1976. (In the first round 70 of the more than 200 applications were approved.) These PL 92-541 funds can be used to hire faculty, build clinics or purchase equipment to be used either on the VA's or on the school's property to provide improved training *and* patient care.\*

In addition, the VA's Department of Academic Affairs has long directly funded a wide range of undergraduate and graduate training programs (see Table II). These funds provide for intern-resident stipends, consultant/preceptor fees and, in some cases, clinic equipment and related remodeling when required for educational purposes at a VA hospital.

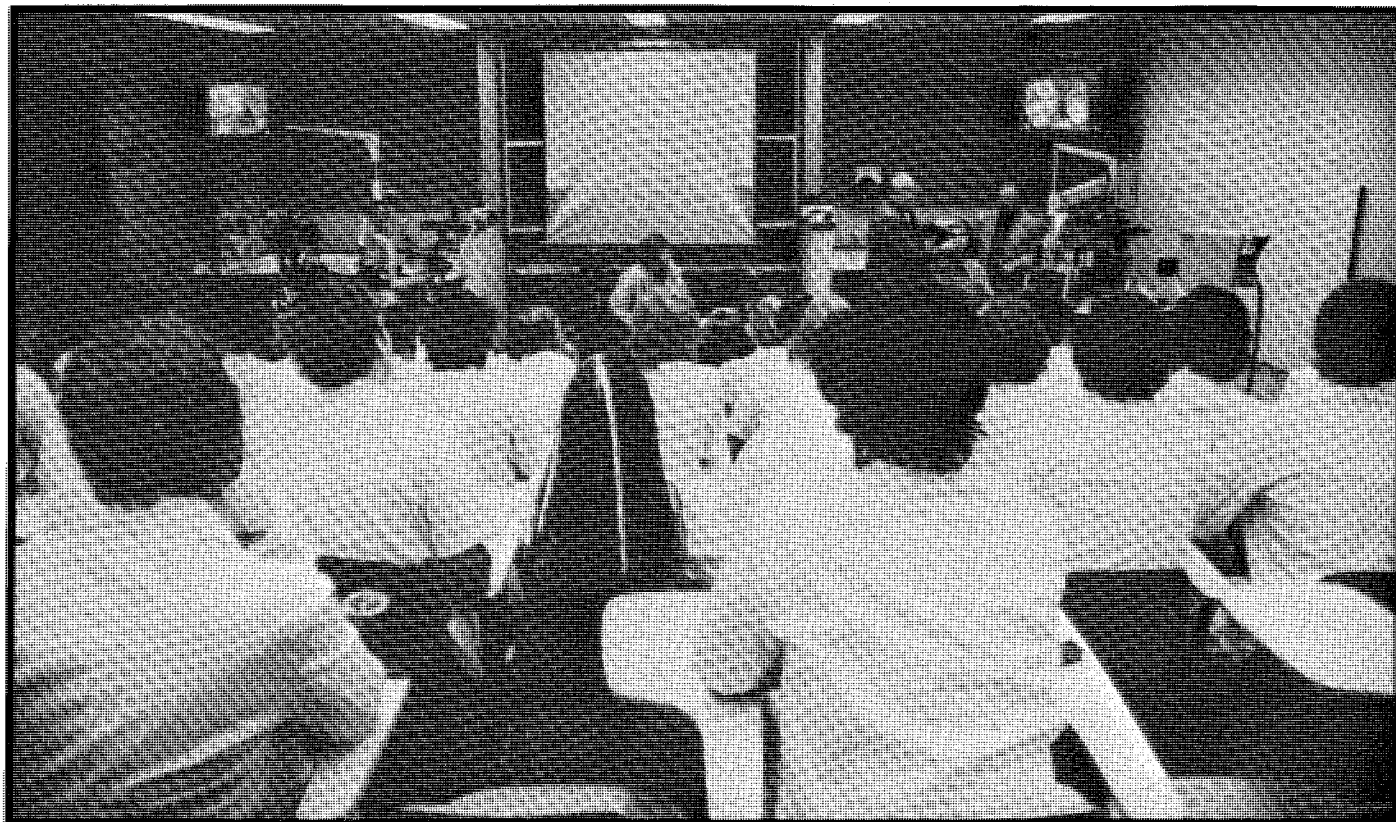
These teaching affiliation programs began on a large scale after 1946 when General Omar Bradley assumed administration of the agency. The resulting academic Deans' Committees that were

formed at these newly affiliated hospitals through the efforts of General Bradley's key official, Dr. Paul Magnuson, produced a sizable and sudden quantum jump in patient care quality (in keeping with Dr. Magnuson's motto, "health care second to none"). The VA's Department of Medicine and Surgery is now currently affiliated with 92 medical schools, 57 dental schools, 314 nursing schools, 45 schools of pharmacy and over 850 other allied professional or supporting health schools.

In contrast, presently only the University of Alabama and the University of California at Berkeley Schools of Optometry are so affiliated with a VA hospital. The type and quality of each of these various training programs at the affiliated hospitals (over half of the 172 VA hospitals are affiliated) are determined and controlled by each hospital's Dean's Committee.

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\*Dr. Richard Hopping, President of The Southern California College of Optometry and the current ASCO advisory representative to the VA Director of Optometry, has recently been named a member of this PL 92-541 biannual review committee and will serve for a three-year period.



Schools of optometry and the Veteran's Administration are both exploring improved methods of instruction. V.A. affiliation with the schools could provide learning experiences with ophthalmologists and other V.A. health personnel.



These training affiliations were established and made possible only after all VA physicians, dentists and nurses were removed from the control of the Civil Service Commission via an Act of Congress. A separate pay, leave, retirement, and rights of employment (continuing education, attendance at medical seminars, etc.) category was created for these physicians, dentists and nurses in Title 38 of the U.S. Code; the set of laws and regulations governing the Veterans Administration. Both the school affiliations and Title 38 changes (allowing these three health professionals to be hired, evaluated and fired by fellow professionals rather than by bureaucrats) elevated the then smaller hospital system (92) to its presently recognized position of high quality health care; a quality of health care among the best to be found anywhere in the world. But this impressive improvement was only possible once the teaching affiliations and Title 38 changes occurred, for only then could the VA utilize the finest and most recent medical methods, recruit and retain well qualified staff and, at the same time, help to train future doctors, dentists and nurses.

### Ophthalmology and Optometry In The VA

In the eye health care, as in other hospital health services, the VA has extensive speciality teaching internships and residencies. This year 188 residents underwent training in ophthalmology at the VA via 141 full-time residency positions while a large full and part-time core of medical school faculty and VA staff contributed to both their training and patient care. The faculty, of course, acted as the preceptors of the residents but they also contributed to maintaining the high standards of eye health care now provided within the VA by conducting related research.

The VA's newly formed Central Office Vision Impairment Committee (with representatives from Ophthalmology, Optometry and Blind Rehabilitation) has just recommended that similar training affiliations be strengthened or established with the schools and colleges of optometry and the graduate programs of blind rehabilita-

Table I	
Specialized Medical Services	Units Operating 5/30/73
Total Units	1,224
Alcohol Treatment Units	65
Blind Clinics	3
Blind Rehabilitation Centers	3
Cardiac Catheterization Labs	65
Day Hospitals	37
Day Treatment Centers	48
Drug Dependence Treatment Units	44
Electron Microscopy Units	41
Epilepsy Centers	5
Hemodialysis Units	46
Home Dialysis	47
Satellite (Self) Dialysis	25
Hospital Based Home Care	18
Hospitals with Intensive Coronary Care Beds	125
Mental Hygiene Clinics	83
Nuclear Medicine	110
Open Heart Surgery Centers	30
Prosthetic Treatment Centers	18
Pulmonary Function Laboratories	128
Renal Transplant Centers	16
Reference Laboratories (Specialist)	7
Respiratory Care Centers	117
Speech Pathology Units	87
Spinal Cord Injury Centers	15
Stereotactic Brain Surgery Centers	5
Specialized Diagnostic & Treatment Units	8
Supervoltage Therapy Units	23

tion. This Vision Impairment Committee was created and has been supported by the Assistant Chief Medical Director for Professional Services, Dr. Lyndon E. Lee, Jr. In addition, the VA's ophthalmological advisory committee has endorsed the concept of expanding the present emphasis on eye health care to the more comprehensive concept of eye/vision care via interdisciplinary team delivery. The ophthalmologists believe this team should consist of ophthalmology, optometry, impaired sight rehabilitation experts, and peripatologists, for it is becoming clear to all concerned with eye/vision care within the VA that only such a truly interprofessional team can best provide, in all areas, the high quality care that ever increasing numbers of eligible patients rightfully expect to receive. At the same time the Chief Medical Director, Dr. John Chase, has approved establishing a VICTORS system.\*

As mentioned, there are presently 188 residents in ophthalmology rotating through 141 residencies and 2 internships (first, second or third year). Additionally, 33 full-time and 52 part-time VA staff ophthalmologists and 90 attending/consulting ophthalmologists (plus numbers of fee-for-service private ophthal-

mologists) now provide the eye health care in the VA. These total 356 (but less than 100 on a FTE basis) but do not include the professors of ophthalmology who visit their residents and provide preceptorship and assistance. Full-time residents were paid an average salary of \$13,307 per year in 1973 (\$11,000 for interns) or a total of \$1,898,287, while the 33 full-time VA staff ophthalmologists averaged \$33,521 (a total of \$1,106,192). A total of \$3,004,480 was thus paid to full-time ophthalmological residents and staff while a comparable amount was paid to visiting attending/consultant and fee-for-service ophthalmologists (estimated to be over \$3 million) or a total resulting salary budget of about \$6 million dollars. At the same time just under \$2 million was spent that year purchasing eyeglasses and contact lenses (excluding the low vision or special optical aids issued), so that a grand total of approximately \$8 million for salaries and materials resulted.

In contrast to this ophthalmological program of 188 residents, 85 staff and 90 consulting/attending and numbers of fee-for-service ophthalmologists, only 8 full-time, 13 part-time and under 40 attending/consulting optometrists were employed. The 8 full-time optometrists' salaries averaged \$16,016 (full-time with at least 15 years of service) and, combined with the part-time optometrists' salaries, totaled only \$300,000 for all optometric services rendered.

The ophthalmology/optometry ratios for numbers employed, full-time salaries and total salary budgets were thus: 356/60 (about 100/17 on a FTE basis), \$33,521/\$16,016 and \$6 million/\$0.3 million. Compared to optometrists, there were six times as many ophthalmologists in the V.A. and they were paid twice the optometrists's salary. (There are, remember, 3 optometry officers and 3 opticians for each ophthalmology officer in the Armed Forces Medical Corps while there are 2 optometrists per

\*Vision Impairment Centers To Optimize Remaining Sight. The first 3 pilot stations are scheduled for FY 1977.

ophthalmologist in the general private practice population.)

While both full-time VA ophthalmologists and optometrists average 54 years of age and have an average of 17 years of service, the ophthalmologist is GS-15 (under Title 38) while the optometrist is GS-11 (under Civil Service). The obsolete Civil Service Commission ratings for optometry presently go no higher than GS-11, a rating exceeded by many other professionals or non-professionals with comparable or even fewer years of training. The ratings obviously need revision. These ratings fail to reflect recent changes in optometric education and will negate attempts to recruit and retain young, well-trained optometry doctors.

Both professions, but especially optometry, are not now being recruited into the VA at a rate sufficient to replace those retiring, and no young, full-time staff (in either profession) are now on duty. Today it is impossible, as mentioned, to recruit or retain young optometrists due to this low Civil Service rating since the career high salary now possible is less than one-half that of the average private practitioner with similar years of practice.

This lack of staff optometrists as well as optometric training affiliations has, quite frankly, sometimes handicapped delivery of comprehensive eye/vision care to eligible veterans because our VA ophthalmologists have had, in the main, to bear the entire weight of providing all types of eye/vision care. They have had no choice but to provide, on their own, many of the non-medical/surgical services needed for complete eye/vision care and thereby have been forced to establish priorities among these; sometimes slighting or delaying services such as contact lenses, special aids for limited vision, ward screenings, routine yearly eye examinations, certification of the blind and other services the modern optometrist provides. In some hospitals ophthalmologists have had to resort to delegating non-medical/surgical work to technicians who sometimes have but a month or two of training.

Ophthalmology is presently in a position similar to that in which otolaryngology found itself in the

past before audiology developed as a separate V.A. field service. The audiologist is able to screen, examine and provide non-medical/surgical, ear/hearing care. There are now 87 audiology/speech pathology clinics in the VA system (over 90 full-time audiologists) that include examinations by audiologists and speech pathologists, who offer diagnostic and prognostic information and referral to otolaryngology as well as therapeutic treatment to maximize communicative abilities. (In all but 8 or 9 of these hospitals, audiology reports to the Chief of Staff as a separate Service.) Last year 299,837 patients were examined in these clinics.

The otolaryngologists are in a much better position than their ophthalmological colleagues since they have many more professionals to provide the non-medical/surgical parts of ear/hearing care that most ENT patients need. On the other hand, the eye surgeons must provide a great many of the required optometric services.

The ocular disease/injury rate in the veteran population is now more than twice that of the general population (VA's population is skewed to the age 55), and while there are 20,800 optometrists and 9,980 ophthalmologists licensed in the U.S. and 10,000 opticians (a few states require registration of opticians but only 4% of all opticians receive any formal training whatsoever), the VA, which draws on a good part of 13% of this nation's population, employs about 1.0% of the country's ophthalmologists, less than 0.08% of the country's optometrists and even fewer opticians (full-time equivalents).

This concentration on eye health care and only on limited aspects of vision care has not been due to insensitivity on ophthalmology's part; it has resulted because they are, so to speak, about the only ones trying to move this particular football in the Va. (They are also, quite rightly, more interested in medical or surgical care than in optometric care.) It should also be

## 1976 VA Budget

Appropriation Requirements — \$16,424,264,000

### Distribution by Major Program

AMOUNT  
(In Millions of Dollars)

General Operating Expenses .....	\$ 453.0	2.7%
Benefit Programs .....	11,723.9	71.4%
Medical Programs .....	3,843.5	23.4%
Construction Programs .....	403.9	2.5%
<b>TOTAL VA .....</b>	<b>\$16,424.3</b>	<b>100%</b>

The President's budget submitted to Congress February 4, 1975 includes \$16,424,264,000 for the Veterans Administration under existing legislation. The VA's share of the total Federal budget will be 4.5 percent.

Average employment for 1975 is expected to increase by 2,215 to a total of 205,765—the highest since 1947. Average employment of 181,511 for the Department of Medicine and Surgery will be the sixth consecutive year of record high employment.

In 10 years—1967 through 1975—appropriations for veterans' benefits and services will have increased over \$9.9 billion, or 155 percent. Average employment has increased 45,541, of which 44,092 has been for the Department of Medicine and Surgery.

The "Medical Programs" Budget will provide:

- Inpatient hospital, nursing home, or domiciliary care for 1,246,531, including 1,138,480 in VA hospitals.
- Veteran outpatient medical care totaling 14,743,000 visits.
- Dependent medical care totaling an average daily level of 450 hospital patients and an annual level of 1,485,000 outpatient visits for the dependents of 100 percent service-connected disabled veterans and veterans who have died of a service-connected disability.

clear that our VA ophthalmologists have not always been used as efficiently as possible because they generally must see 100 presenting patients to locate the 5 to 10 actually requiring their specialized medical treatment. They have been forced to practice primary care, optometry, ophthalmology and even, sometimes, opticianry.

VA ophthalmologists have thus been pressured by these circumstances to practice at less than their highest or most appropriate training levels. These men have never failed, however, to provide excellent ophthalmological eye care once patients reached them, and their efforts are to be admired. It is also clear, however, that some asymptomatic patients needing care are not seen. Ophthalmologists are overdue for help; they need both professional optometric colleagues to help them run with the football and opticians to provide blocking for them both.

It is apparent that that optometry, via staff or teaching affiliations (the backbone of the ophthalmological effort) is poorly utilized within the VA. While some optometry schools have, in fact, approached local VA hospitals in the past with plans for teaching affiliations only to be turned down for lack of space, money, or in isolated cases, resistance on the part of ophthalmology, the situation is changing and these efforts should be renewed.

One solution optometry schools can offer to the VA's goal of improving its patients' eye/vision care program is to work with the hospitals in setting up optometric teaching and residency programs. The VA and the medical schools have, as we have seen, long recognized the value of these affiliations and over 25% of all medical/surgical residents trained in this country receive training each year at VA hospitals. Everyone benefits from these teaching affiliations since the hospital receives excellent, low cost, and experienced staff support via the preceptors and their young vigorous residents and interns while the schools, on their part, receive financial support and diverse training and patient exposures for their students. Several medical schools have, in fact,

*Continued on page 86*

#### NUMBER OF TRAINEES IN DM&S

	FY 1972	FY 1973	FY 1974	Estimate FY 75 76	% of Nation's Total 1974
Medical House Staff	11,774	13,638	14,097	15,100	25%
Dental House Staff	327	413	469	500	14%
Medical/Dental Students	12,020	13,758	13,153	13,400	29%
Nursing Students	18,292	21,870	24,995	25,000	10%
Optometry Students	—	10	20	—	0.6%
Psychology Interns	1,412	1,344	1,652	1,600	18%
Social Worker Interns	991	1,121	1,310	1,300	12%
Other Associated Health Professions	10,786	12,723	15,041	15,300	—
Administrative Trainees	595	661	729	800	—
	56,197	65,538	71,466	73,000	

The Veterans Administration is the largest single trainer of health professionals. All of the above trainees, except medical/dental, nursing and optometry undergraduate students (rows 3-5) receive stipends or salaries from the VA (House staff refers to interns and residents while the remaining rows 6-9 refer to graduate trainees.) For comparison, optometry's 12 schools now collectively enroll about 3,400 students but less than 20 of these (and no optometry residents) received training at a VA hospital in FY 1974 (UAB).

## Table II

#### NUMBERS OF RESIDENTS AND INTERNS IN TRAINING AT VA HOSPITALS AND CLINICS

Specialty or Subspecialty	1972 Total
Allergy	6
Anesthesiology	155
Cardiology	65
Colon and Rectal Surgery	1
Dermatology	109
Gastroenterology	84
General Surgery	888
Internal Medicine	1,824
Neurology	177
Neurosurgery	84
Ophthalmology	177*
Orthopedic Surgery	228
Otolaryngology	133
Pathology	229
Physical Medicine	66
Plastic Surgery	53
Psychiatry	355
Pulmonary Diseases	63
Radiology	430
Thoracic Surgery	49
Urology	180

\*188 in 1974.

#### TYPES AND NUMBERS OF VA STAFF ENGAGED IN RESEARCH

Staff Physicians	2,217
Consultants	629
Attending Physicians	160
Interns and Residents	248
Dentists	114
Research fellows	97
Ph.D.'s	593
Doctors of veterinary medicine	18
Other scientific personnel	521
Without VA compensation	798
Total	5,695



# BOOKS

Book reviews, abstracts and comments are solicited on any publications or learning resource materials related to optometric education. Book reviews should include complete publication information.

by Frank A. Brazelton

## Teaching and Learning in Medical School

George E. Miller, Editor  
Harvard University Press, 1961.

The old aphorism which says "Those who can, do; those who can't, teach," reflects a viewpoint as American as plastic wrap. We are a nation of doers and our species is *Homo Faber* rather than *Homo Sapiens*. The glories of our civilization are found on highways and in kitchens rather than classrooms and libraries.

There may be no place in which this attitude is maintained more tenaciously than in teaching institutions for the healing arts. Although the apprentice method as a model for health professions education has passed into history, its legacy remains, especially in clinical teaching. Implicit in that method was the assumption that the experienced clinician or researcher is automatically endowed with the capacity to transmit his skills, knowledge, and behavior to the fledgling practitioner. This short, provocative and very readable book confronts that attitude with evidence which does not so much contradict as reassess it in the light of our present knowledge of how learning occurs. Its premises are that teaching itself is a professional discipline and that teaching skills are no more innate than patient care skills.

The text is organized around what might be called the five fundamental variables of the educational process: the characteristics of the learner, the function of the teacher, the role of learning objectives, the types and uses of teaching methods, and the problem of evaluation.

This short synopsis does the authors some disservice for its rather abstract nature tends to hide the many concrete examples they cite which illuminate their thesis. The medical connotation should not disturb the potential reader. One is struck by the parallels rather than the differences between medical and optometric education. Little imagination is required to transpose the illustrative incidents to an optometric educational setting. Indeed the problems in health professions education seem generic. The relevance gap between basic science and clinical instruction, the objective assessment of clinical performance, and the

question of how professional attitudes are formed, are just a few of the issues which perplex all of us.

The author's approach is logical and practical and the exposition so clear that one is tempted to regard their conclusions and suggestions as self-evident. Whether the discussion concerns evaluating diagnostic skill or how to use a blackboard, sources of student anxiety, or conducting seminars, it reflects the consensus of experienced educators who have melded their own perceptions with the wealth of research and information now available. The health professions educator who wants to do a more effective job could scarcely find a better guide.

## Computer Assisted Test Construction

Gerald Lippey, Editor  
Educational Technology Publication  
1974, (\$11.95).

Not too many years ago, the magic letters in educational technology were CAI-Computer Assisted Instruction. A combination of operant conditioning, television or typewriter terminals, and electronic "brain" was projected to revolutionize teaching and learning. Untold hours and dollars, mostly Uncle Sam's, were siphoned into this new panacea. The vistas sketched by its prophets were bold and broad with many of the details left vague. Alas, it was some of those very details which proved so refractory in practice that the revolution stumbled to a halt. Many educators reluctantly concluded that the "I told you so" camp had won again and that, perhaps, "a simple bench, Mark Hopkins on one end and I on the other," still epitomized teaching. Overambitious, oversold, and bemused by the computer mystique, CAI promised more than it could deliver and, in the process, alienated many in the educational community.

However the role of the computer in teaching may turn out, it seems apparent that its ultimate function will more likely be to assist rather than *displace* the classroom teacher. Some recent developments point the way to this kind of utilization. In January, 1972, a conference sponsored by IBM brought together a small group of educators who, working independently, had begun to apply computers to constructing tests. At that time only 20 such programs were in operation. By November, 1974, that number had increased tenfold. A second conference at

that time assembled nearly 300 educators, computer programmers, administrators, and others working in or intrigued by the possibilities of Computer Assisted Test Construction (CATC).

This book summarizes the principles and mechanics of CATC. The concept is based on the nature and purposes of testing itself. Every instructor is faced with the problem of designing and constructing tests which are valid, reliable and discriminate between good and poor learners. Ultimately these characteristics are statistical in nature. Each question or item in a test has certain traits such as difficulty level and discrimination power which distinguish it as adequate or not for its purpose. The determination of these traits is called *item analysis*. The potential value of CATC is its capacity to help the instructor select and maintain good items in sufficient numbers to generate powerful measurement instruments readily and easily.

The process begins with the teacher who, alone, can write the questions pertinent to his course of instruction. These must be in objective format. They are then translated and stored in the computer as an item bank. They can be retrieved at will and, in more sophisticated installations, test copies will actually be printed by the computer. Once administered, the test results are scored by the computer, a complete item analysis is done, and the results go back to the instructor. Once the performance characteristics of the items have been determined, an almost infinite number of parallel forms of a given test can be constructed and the instructor can generate short tests for teaching purposes, as well as longer tests for evaluation, at will.

These methods have been used extensively in some colleges and universities where banks of up to 10,000 items in physics, biology and psychology have been generated. Most courses of instruction of one semester would require a bank of 1,000-1,500 items. Though this may seem a formidable number, it probably does not exceed what most optometric instructors who have taught for 4 or 5 years have already written. Since many parallel questions can be constructed based on a single concept, the expansion of an item pool in any given area is not as difficult as might be thought.

It is probably premature to expect that CATC will find wide acceptance or use in optometric education at this stage, but its potential should not be overlooked. For those who wish to lift the veil and see what our future may have in store, this book is highly recommended.

Frank A. Brazelton, O.D. is Director, Optometric Center of Fullerton, Southern California College of Optometry.

# Affirmative Action:

## Walking the tightrope between Equal Opportunity and Reverse Discrimination

by Sheila Doctors

American colleges and universities have been walking an administrative tightrope ever since President Lyndon Johnson signed Executive Order 11246 back in 1965. Known popularly as the "affirmative action" order, the directive has produced more than its share of confusion, debate, and division in higher education—as well as an abiding misconception of what *affirmative action* really means. All of the optometric institutions are federal contractors, and therefore share in the affirmative action obligation.

A decade after its signing, the controversial order is still being explained anew by the HEW Office for Civil Rights (OCR), the agency charged with enforcing the affirmative action order. The mere mention of affirmative action today can trigger a host of emotional and/or ideological reactions. This article hopes to add a helpful perspective to the issue by confronting some of the popular misconceptions surrounding affirmative action and attempting to clarify them.

A successor to several equal

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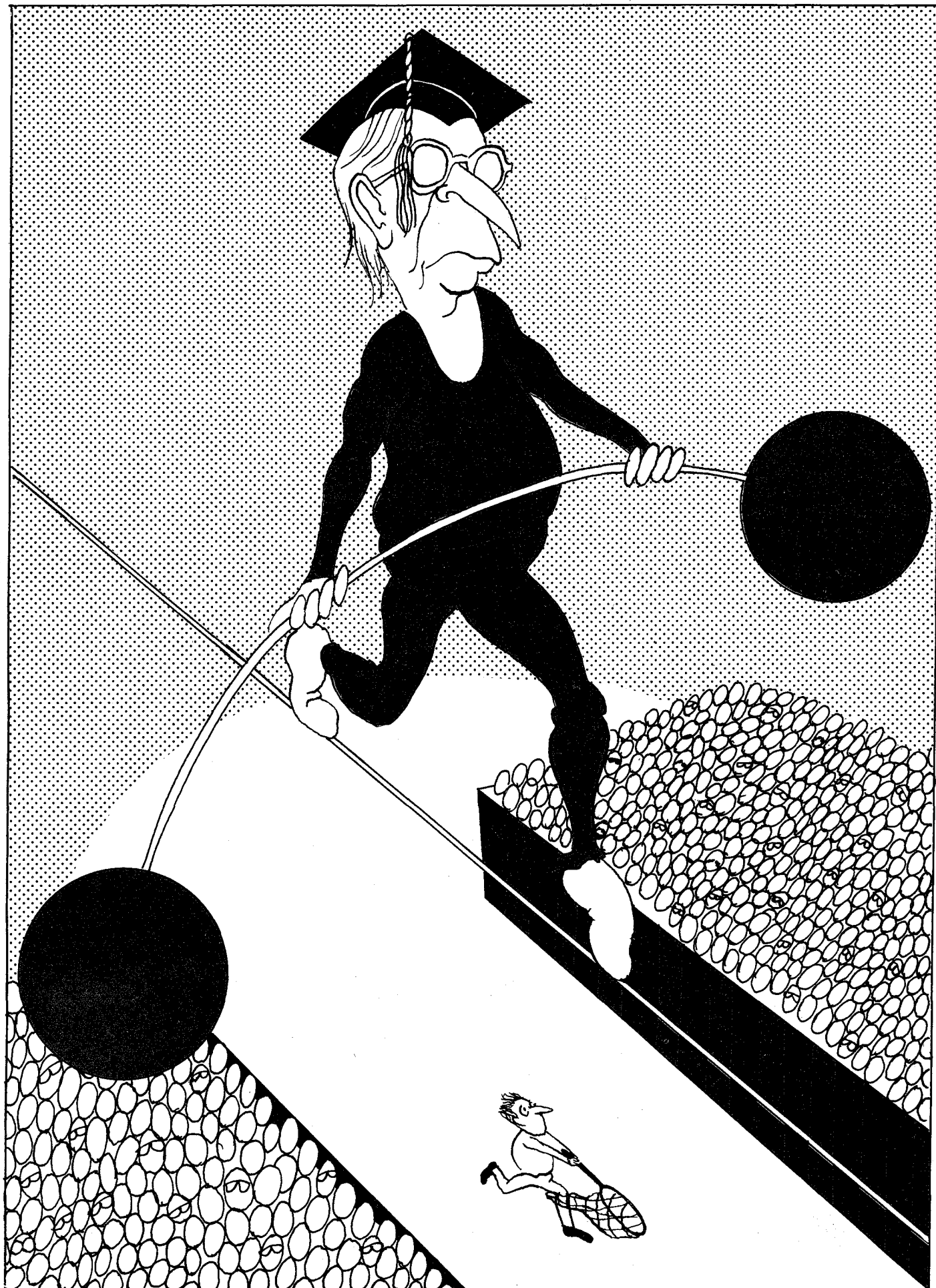
Sheila Doctors is the editor of the monthly "ASCO Educator."

employment opportunity provisions stretching back to the Truman Administration, Executive Order 11246 embodies two distinct (and according to some, contradictory) concepts: *nondiscrimination* and *affirmative action*. It prohibits federal contractors and subcontractors, including institutions of higher learning, from discriminating against any employee or applicant for employment. This applies to every person, not only to members of minority groups. No person may be denied employment or related benefits because of race, color, religion, sex, or national origin.

At the same time, the Executive Order requires affirmative action to overcome "underutilization" of women and minorities. Affirmative action obligates the contracting institution to do more than ensure employment neutrality with regard to race, color, religion, sex, and national origin. In exchange for taxpayers' dollars, the college or university must make additional efforts to recruit, employ, and promote qualified members of groups formerly excluded—even in the absence of evidence of previous discrimination by that particular college or university.

To some, this constitutes a perverse self-contradiction. Namely, that the government, in seeking to end discrimination, is in fact mandating and authorizing measures inherently discriminatory. The seeming contradiction has produced some of the most troublesome questions regarding affirmative action. These questions have been raised not only by critics of affirmative action, but also by well-intentioned administrators who sincerely wish to comply with the order but are too confounded to know how. How can they increase the ranks of women and minority faculty members without discriminating against white male applicants? Some say they can't.

According to Peter E. Holmes, Director of the HEW Office for Civil Rights (OCR) there is no contradiction; affirmative action does not require so-called "reverse discrimination." Holmes describes affirmative action as a commitment. The underlying assumption of affirmative action, says Holmes is "that qualified women and minority applicants for faculty positions exist and that, as federal contractors, universities must give them equal opportunity to compete for those



C. Steacy



positions by eliminating practices which have excluded them in the past."

Holmes recently circulated a greatly publicized memo to this effect among the leaders of 2,400 colleges and universities. That memo, which reaffirms the schools' right to hire the best qualified faculty and staff, has been called a re-interpretation and even a reversal of the affirmative action order. However, according to Holmes, it merely clarifies what has long been the position of the OCR

According to HEW's **Higher Education Guidelines**, published in 1972 to aid in the enforcement of Executive Order 11246, "nothing in the Executive Order requires that a university contractor eliminate or dilute standards which are necessary to the successful performance of the institution's educational and research functions."<sup>1</sup> *It was never the intent of the affirmative action concept to require that a university employ or promote unqualified persons, according to Holmes.* Furthermore, it is a violation of the Executive Order for a prospective employer to state that only members of a particular minority group or sex will be considered, or even preferred for a position, or that the available slot is an "affirmative action position."

It is ironic, therefore, that critics of affirmative action often point to the proliferation of recruitment advertisements which state racial or sexual preferences as proof that affirmative action requires reverse discrimination. Such advertisements may indeed result from ill-advised affirmative action efforts, but they are certainly not in compliance with actual affirmative action requirements.

#### Affirmative Action Recruitment

What *is required* is that each school construct and adopt its own standardized employment *and recruitment* procedures. It must articulate in writing (and make available upon request) detailed standards and criteria for appointment, retention, and promotion. Otherwise, arbitrary and/or discriminatory employment decisions would be more likely. Of course, a certain range of discretion is inevitable and therefore permissible under the *Guidelines*. When such

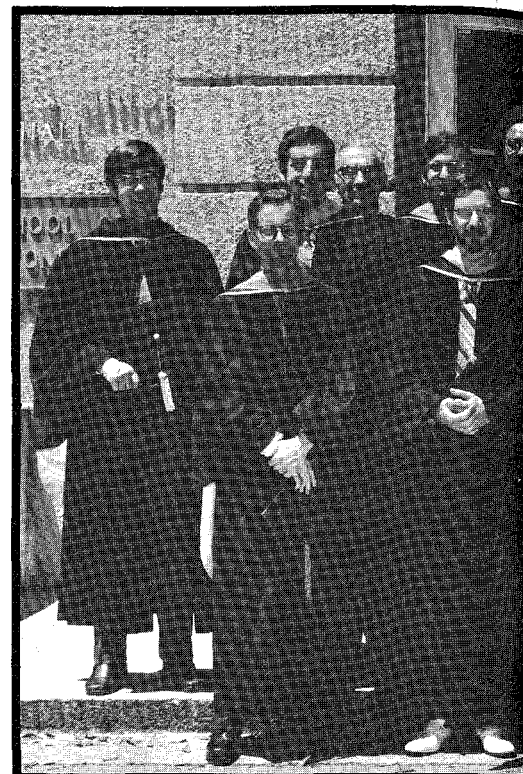
discretion appears to have interfered with equal opportunity, however, the **Guidelines** require rigorous re-examination and elimination of the discriminating effects.

In recruiting, for example, the university must carefully examine its recruitment policies. Where a much lower representation of women or minorities appears in the applicant pool than is available in the work force, the university contractor must try to locate and encourage qualified women and minority candidates. Universities must recruit women and minority faculty members "as actively as they have recruited white males."<sup>2</sup>

Affirmative action may not require reverse discrimination, but it is not hard to see that anyone responsible for implementing affirmative action has to do some pretty fancy stepping to balance on what is a very fine line indeed.

#### Optometric Applicant Pool

Some help for optometry schools may be found in the recently published report from the School of Optometry, University of Alabama in Birmingham (UAB).<sup>3</sup> While struggling to evolve its own affirmative action program, UAB developed a description of the optometric applicant pool. UAB assumed that, at least insofar as the clinical optometric faculty is concerned, the



Most optometry school faculties looked like this a few years ago, but affirmative action is changing that. The

applicant pool would consist of the active optometric practitioners. With the cooperation of Mr. Douglas Redmond of the Optometric Manpower Resources Project,<sup>4</sup> (funded under an HEW grant), a summary table of the age, sex, and racial backgrounds of the active optometrists in the United States was prepared.

### Table I

Optometrists Availability Data

Sex	
19,269 active optometrists	100%
18,859 male optometrists	97.9%
410 female optometrists	2.1%
<hr/>	
19,269 total optometrists	

Age		
Under 30	1,694	8.8%
30-39	3,084	16.0%
40-49	5,283	27.4%
50-59	6,236	32.4%
60-69	2,177	11.3%
70-	795	4.1%
<hr/>		
	19,269	100%

Racial	
19,269 active optometrists	100%
18,655 white optometrists	96.8%
105 black optometrists	0.5%
287 Japanese and Chinese optometrists	1.5%
9 Other Asian optometrists	0.05%
13 Indian-Eskimo optometrists	0.07%
20 Other	0.10%
38 Mexican-American	0.2%
1 Puerto-Rican	
10 Other Latins	0.05%
131 Not reported	0.07%

Courtesy Optometric Manpower Resources Project 1973



Berkeley optometry school, which once had no women, now has four women on its faculty.

Table I shows that the minority and female applicant pools total 1,024, assuming no overlap. That, of course, is an erroneous assumption. According to UAB, the total of these two pools is less than 1,000, or approximately 5% of the active optometrists.

In an attempt to confirm some of these statistics, UAB obtained a membership roster of the National Optometric Association. The geographical distribution of the NOA members is shown in Table II.

These figures show that the National Optometric Association has a membership that includes almost 87% of the active black optometrists in the nation.

UAB also made a compilation of the members of the American Academy of Optometry. UAB felt that these individuals, by their membership in the Academy, showed above-average interest in the scientific endeavors of the optometric community, and should be above-average candidates for academic careers. A total of 47 members of the Academy were women. Of these 47 women, 26 were already affiliated with a college or university, either full or part-time. That is approximately 55% of all female members of the

Academy. A geographical listing of the female membership is shown in Table III.

An additional recruitment technique strongly recommended by UAB is the publication of advertisements for faculty in the national optometric press. This is documentation of the intent to open the search to all interested parties. It does not mean that a particular candidate must be selected. It merely means that a search has been conducted to determine who is available and what the individual's qualifications are. The schools and colleges would remain free to determine who is the best qualified candidate. Of course, as UAB points out, the school should be prepared to defend its reasons for selecting a particular applicant over all the others.

### Goals and Quotas

Controversy about the affirmative action commitment first erupted in 1972 when Professor Paul Seabury, University of California at Berkeley, published a scathing attack on the regulations. About the same time, the **New York Times** ran an editorial sympathetic to Prof. Seabury's point of view, charging that a resort to quotas was the "unmistakable suggestion in HEW's approach." Although the OCR has traditionally condemned illegal hiring quotas, critics say there is no real difference between *quotas* and the *goals* required by the **Higher Education Guidelines**.

Dramatizing what he believes to be a distinction without a difference, Dr. Seabury conceived the following labels: the *quoal*, a slow-moving quota-goal; and the *gota*, a faster-moving quota-goal.

Is HEW playing a semantics game? The affirmative action **Guidelines** assert, "While goals are required, quotas are neither required nor permitted by the Executive Order." According to Mr. Holmes, this is not semantics. Institutions may have tended to focus too narrowly on the numbers aspect of affirmative action, he believes. He acknowledges that affirmative action is result-oriented, but says that the development of goals and timetables is but one integral part of an acceptable affirmative action plan.<sup>5</sup>

## Table II

Alabama	1
Arkansas	1
Florida	2
Georgia	8
Illinois	18
Indiana	2
Kentucky	3
Louisiana	3
Maryland	1
Massachusetts	1
Michigan	7
Minnesota	1
Mississippi	1
New Jersey	4
New York	4
N. Carolina	6
Ohio	4
Oklahoma	2
Penn.	4
S. Carolina	2
Tennessee	1
Texas	6
Virginia	8
Washington	1

Total 91

Courtesy School of Optometry, University of Alabama in Birmingham, 1974.

## Table III

Alabama	2
California	10
District of Columbia	1
Florida	1
Illinois	3
Indiana	6
Kentucky	1
Maine	1
Massachusetts	4
Michigan	1
New York	3
North Carolina	2
Ohio	4
Pennsylvania	2
Tennessee	1
Texas	3
Virginia	1
Wisconsin	1

Total 47  
(2.66% of total U.S. Membership)

Courtesy School of Optometry, University of Alabama in Birmingham, 1974.

Even if the university falls short of its goals, that does not necessarily constitute non-compliance. If the university generally follows its affirmative action program, it is likely to be found in compliance with both the spirit and the letter of the Executive Order. According to Holmes, the *process* is crucial:

If the institution gathers and properly evaluates all relevant data, carries out a thorough utilization analysis, secures accurate information on availability, and sets in motion an internally well-understood recruitment program effectively designed to reach qualified women and minority candidates, this total process should lead to successful affirmative action in hiring policy. *There is no intrinsic magic to figures.*<sup>6</sup>

There are other misconceptions about affirmative action whose origins lie in the ambiguity of a word. Especially problematical are "minority" and "underutilization." The word "minority" does not actually appear in either the Executive Order or the Civil Rights Act of 1964, although it is used and defined, in HEW's **Higher Education Guidelines**. It is not surprising therefore that some have balked at their obligation to apply a standard so arbitrarily-derived.

The **Guidelines** state: "Minorities are defined by the Department of Labor as Negroes, Spanish-surnamed, American Indians, and Orientals." What of other minorities reportedly under-represented in higher education? Appalachian-Americans, Irish, Greek, Italian and Slavic-Americans have all been suggested for inclusion as "underutilized minorities." Furthermore, there remains the overwhelming problem of ethnic measurement. Consider the harsh realities of attempting to collect statistical data on faculty members' minority group affiliations, as defined by the Department of Labor or otherwise. Ethnic classification can become very sticky business, as many universities have already discovered.

Dr. George Roche, President of Michigan's Hillsdale College and author of **The Balancing Act**, a book staunchly opposed to affirmative action, used the following tongue-in-cheek example:

I would request you kindly to define more precisely what you mean by the term "black." Am I right in supposing that you are seeking information regarding American faculty of African descent? Or do you wish West Indian and African faculty members to be included—or dark skinned faculty from other countries?<sup>7</sup>

Even for those who do not enjoy poking holes in affirmative action, it is not always easy to know who is or who is not a minority applicant under the meaning of the Department of Health, Education, and Welfare.

Another troublesome term is "underutilization"—a key word in the **Guidelines**, but unfortunately fraught with ambiguity. Underutilization is loosely defined in the regulations as "having fewer women or minorities in a particular job than would reasonably be expected by their availability." The affirmative action order requires that a school identify and try to overcome such underutilization.

Critics have seized upon this idea as proof that HEW is far more interested in placing women and minorities in faculty positions than it is in preserving the quality of higher education. However it is important to understand that what is meant is not the *availability*, of women and minorities within the total population, or even within the total labor force. What is meant is the *availability of qualified* women and minorities. Underutilization of these qualified individuals is the real concern of HEW, and it is for them that affirmative action is required.

#### **Compliance, Sanctions and Academic Freedom**

Perhaps the most recurrent theme found in articles opposed to affirmative action is the notion of the heavy hand of government. For there is no question that Uncle Sam can impose some serious penalties on colleges and universities which do not comply with the affirmative action order. All universities subject to the Executive Order (i.e., universities which are holders of federal contracts) must develop and implement an affirmative action plan. Drafting such a plan requires institutions to continually update personnel data







such as race, sex, and job classification. An administrative procedure must be set up to organize and monitor the plan and to continue carrying out the required auditing and reporting obligations.

Institutions which fail to comply with these admittedly expensive and burdensome requirements become subject to the following OCR sanctions and penalties, all of which are authorized by the Executive Order:

1. Publication of the name of the non-complying contractor.
2. Cancellation, termination, and suspension of contracts or portions of contracts.
3. Debarment from future contracts or extensions or modifications of existing contracts.

In addition, the Director of the Office of Federal Contract Compliance may, in some cases, recommend to the Department of Justice or to the Equal Employment Opportunity Commission (EEOC) that judicial proceedings, including criminal proceedings, be commenced.

Concern has arisen particularly over the government's authority to postpone a contract award. Under existing procedures, the OCR routinely investigates the affirmative action plan of any university which has pending a contract award application for \$1 million or more. In addition to these routine pre-award reviews, OCR engages in several other kinds of compliance reviews, including complaint investigations. Whereas the EEOC investigates individual complaints of discrimination, OCR investigates class or group complaints and allegations of general institutional patterns of discrimination.

For staunch defenders of academic freedom, no doubt these can be hard pills to swallow. However, it should be remembered that there are practical and legal constraints to the authority of the OCR. Says Mr. Holmes:

Far from applying sanctions, penalties, and threats in such a manner as to constitute what some might regard as an abuse of power, the comparatively few cases in which the Office for Civil Rights has prompted the delay of contract awards is evidence enough of our continuing endeavor to provide the higher

education community with every opportunity to meet its obligations.<sup>8</sup>

As of April 14, 1975, 501 complaint cases filed under the Executive Order are still pending. Only 280 cases have been resolved since the Order was signed. As of April 3, 1975, OCR reports that it has requested and received only 170 affirmative action plans. Another 115 affirmative action plans have been voluntarily submitted to OCR for review. The total number of affirmative action plans accepted to date: only 33.

It is likely that the affirmative action obligation will continue to be something of an administrative headache to the higher education community and to HEW for some time to come. Hopefully, however, it will become less of a problem as more people come to understand what the program requires and what it does not require. The misconceptions which have plagued affirmative action efforts for a decade will hopefully give way to more widespread understanding of what the commitment actually entails. Then, we are more likely to see the advancement of equal opportunity without compromising the quality of higher education. **JOE**

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8. *op. cit.* Holmes, p. 10.



# The Ohio State Tradition: Innovation and Professional Excellence

By Frederick W. Hebbard

**T**radition and innovation—these two words both describe The Ohio State University College of Optometry. The traditional ties between the optometry school and the state university go back to 1914, when, under the leadership of Dr. Charles Sheard, an optometry curriculum was established in the Department of Physics. That move, in itself, was an innovation since, at that time, all but one of the existing optometry programs were proprietary or part-time courses of instruction.

The decision to develop the optometry curriculum as a separate academic discipline occurred simultaneously with the merging of the private Starling-Ohio medical

and dental schools into the Ohio State University structure as the Colleges of Medicine and Dentistry. These changes were inspired by the 1910 recommendations of the historic Abraham Flexner Commission on Medical Education. That study is well-known for its conclusion that medical schools, a majority of which were then proprietary, should associate with universities and build on solid education in the basic sciences related to health.

## Formative Leadership

Dr. Charles Sheard, the "Father of Optometry at OSU," was a physicist whose major study was physiological optics. He had been practicing optometry on a part-time

basis in his home near the OSU campus, as well as lecturing at various state and national meetings of optometrists for several years. It was Dr. Sheard's aspirations, along with the encouragement and assistance of many other dedicated men, which made the Ohio State University College of Optometry a reality.

Among those men who should be mentioned for their role in early development of the optometric program at OSU are: Dr. Emil Arnold, an Ann Arbor (Michigan) optometrist; Dr. John C. Eberhardt, the Dayton practitioner credited with independently coining the word "optometrist" and encourag-

*Dr. Hebbard is Dean of the OSU College of Optometry.*

ing its wide-spread usage (Dr. Eberhardt is also a past president of the Ohio Optometric Association and the American Optometric Association), and Dr. P.C. Harris, of Columbus, who later became first president of the Ohio State Board of Examiners in Optometry.

It should be noted in the context of this early development that in 1914, only thirty-three states had passed laws recognizing the profession of optometry. Some state laws required no education to practice, mandating only that the optometrist pass a state board examination, while others—among them New York, Iowa, Delaware, Indiana, and Michigan—required at least two years of high school, plus three years of study in an optometrist's office or graduation from a school of optometry. Ohio had yet to pass an optometry law and did not do so until 1919.

### **Two Hundred Dollars Per Student**

In August, 1914, Dr. Sheard submitted a proposal to The Ohio State University recommending a two-year certificate program in optometry. One month earlier he had received the unanimous vote of the Ohio Optometric Association authorizing him to submit the proposal and pledging \$2,000 to be given to the University by September 1. (In addition, the proposal provided for equipment necessary to educate ten students.) On August 4, the university trustees approved the proposal and named Dr. Sheard director of the courses. A month later, twelve students registered. The \$2,000 contribution seems small by today's standards, but it represented over 20% of the \$9,150 in gifts for all purposes made to The Ohio State University in 1914!

The two-year optometry curriculum requiring two years of high school education for admission included first-year courses in mathematics, physics, anatomy, physiology, English, theoretical optics, practical optics, and theoretical and practical optometry. The courses during the second year were theoretical optics, physiological optics, practical optics, theoretical optometry, ocular pathology, and optometric practice, in which the students spent at least

one-half week for one semester in the office of an optometrist.

Almost simultaneously with the start of the two-year certificate course, Dr. Sheard submitted, in September, 1914, to the University a proposal for a four-year degree course to replace it. This recommendation was approved in May 1915, by the Committee on Instruction, and subsequently approved by the Board of Trustees in time for the opening of the new academic year in September, 1915.

### **A Major Milestone**

Looking back, we realize that the establishment of the four-year professional degree program was a major milestone in optometric history, for it was *the first four-year degree program to train optometrists offered anywhere, and it was at a major university.* It set a pattern for

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“Ohio State has been a pioneer in developing computer-assisted instruction in optometry.”

“At least ten state optometrist associations have had Ohio State graduates as presidents.”

“... the first four-year degree program to train optometrists ... at a major university.”

“... leadership in optometric education and research implies initiative in the pursuit of excellence.”

leadership which has continued in many ways.

Professor Sheard continued to head the program until 1919, when he accepted a position with the American Optical Company as head of its scientific bureau and editor of its *American Journal of Physiological Optics*. His interest in optometric education research continued throughout his life, and he personally contributed a substantial sum to the Sheard Foundation for Research in Vision. (The Foundation was set up in 1944 by a number of his admirers in order to provide an endowment to assist vision research at Ohio State.)

Dr. Sheard served in the 1940's as a member and chairman of the AOA Council on Optometric Education, and actively promoted a five-year curriculum to lead to the professional doctorate. He continued to work for the advancement of optometric education, assisting in the efforts of The Ohio State University to establish the first mandatory six-year professional program to lead to the Doctor of Optometry degree at a major state university. He died in 1963, only a few days before the Ohio State University Faculty Council approved the six-year program.

### **Developing Graduate and Research Programs**

The year 1935 marked another major milestone in optometric education at Ohio State. In the 1930's, enrollment in optometry increased considerably, and during that decade there were 192 graduates, compared with 78 previously. However, the University administration felt that optometry had not made adequate academic progress, and was not making a sufficient contribution to research. Dr. Glenn A. Fry, a Ph.D. psychologist from Duke University, was named to head the program and charged with improving it academically. Dr. Fry, working with Professor Alpheus W. Smith, Chairman of the Department of Physics, lost no time in establishing a graduate program leading to the M.S. and Ph.D. degrees in physiological optics, the first to be associated with an optometry program. The output of this graduate program helped to meet the pressing need for qualified faculty, not only at Ohio State but

also at other schools and colleges of optometry—a need which is not fully met even today.

In 1937, the University gave its vote of confidence by establishing the School of Optometry within the College of Arts and Sciences. In 1939, following the original goal of leadership in optometric education, the curriculum was extended to five years, with one year of pre-optometry and four years in the School of Optometry. In 1946, this was changed to two years of preoptometry and three years in the School of Optometry.

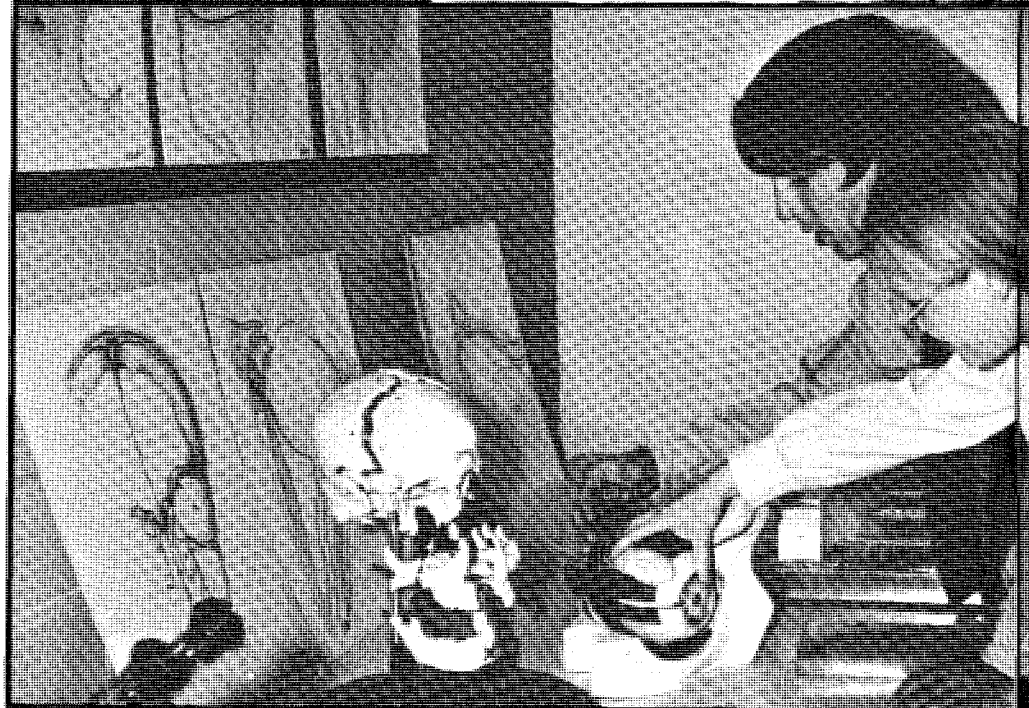
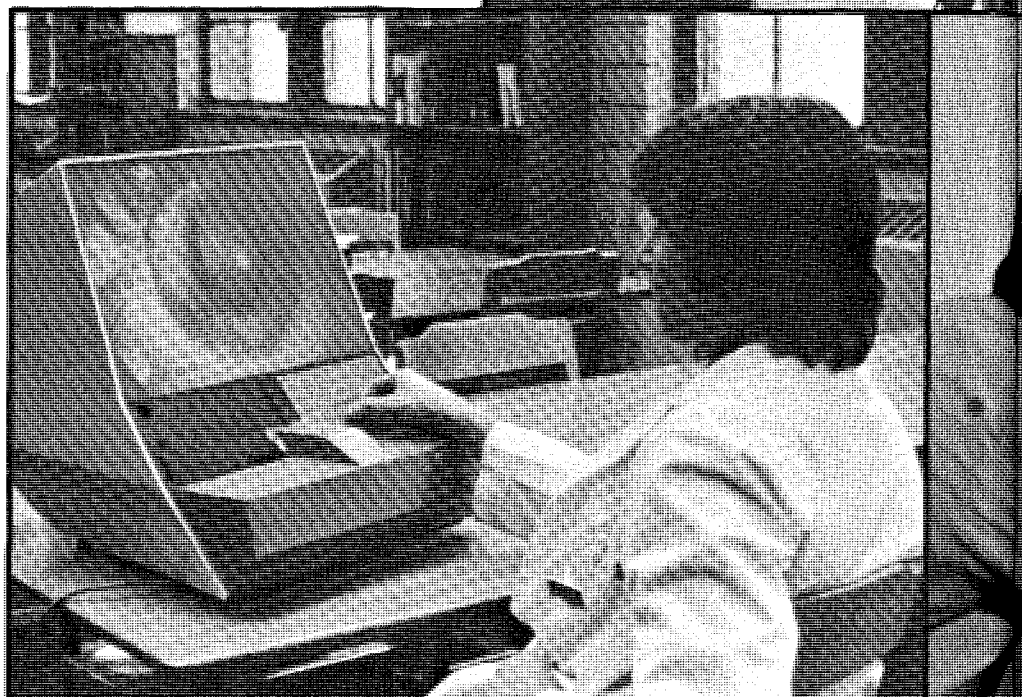
### Expansion of Facilities

With the increased enrollments from the return of veterans, classes were expanded to sixty to help meet the demands for optometrists. The clinics and laboratories were still located largely in Mendenhall Physics Laboratory, as they had been since 1914, and the need for a building for optometry became so critical that Ohio optometrists took effective action. A fund drive from optometrists and friends of optometry raised over \$108,000 which was supplemented with a \$200,000 appropriation from the Ohio Legislature.

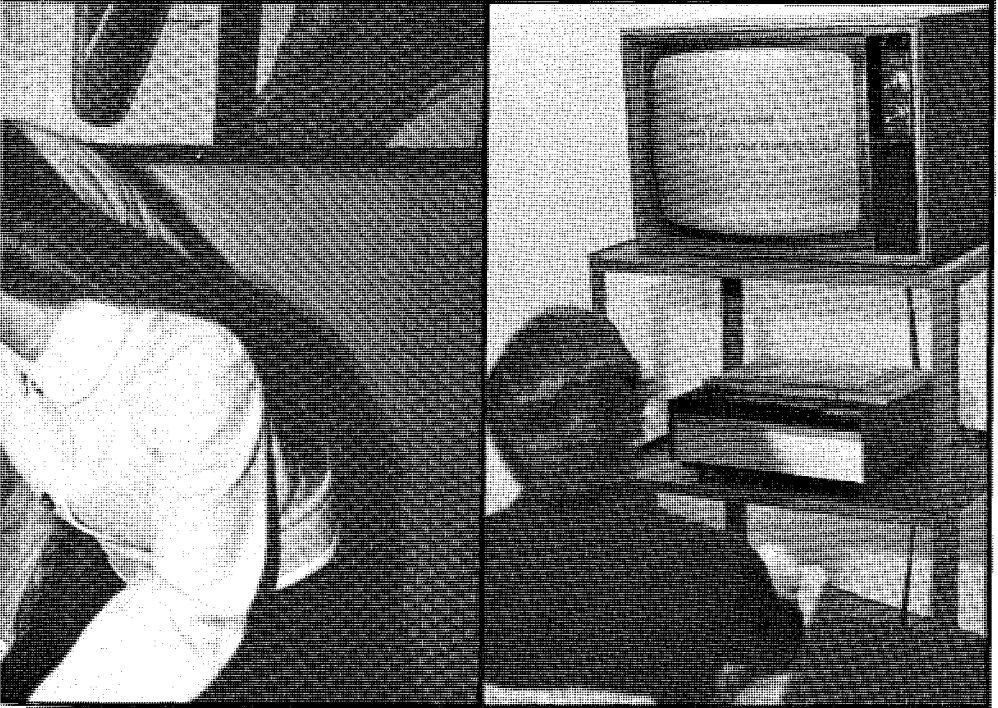
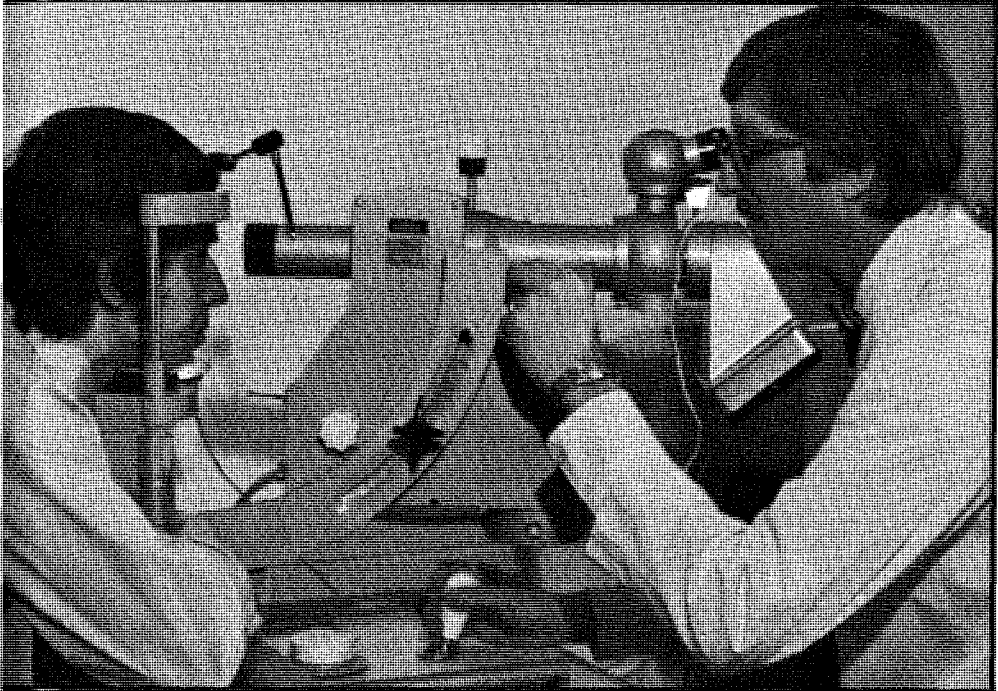
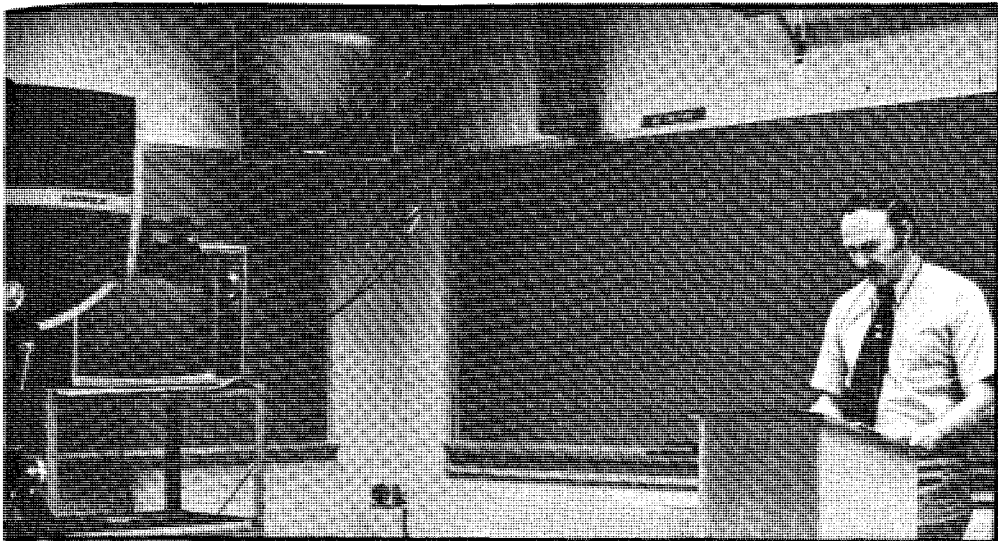
A committee of University administrators and optometrists was formed to determine the location of the new building. Some optometrists felt that a site in the education complex of the campus should be selected, while others felt that the evolving role of optometry would move the profession more and more in the direction of a full-fledged health profession. This viewpoint won out, and a site was selected adjacent to the out-patient clinic of the College of Medicine which is near the College of Medicine and the College of Dentistry.

With the completion of the Optometry Building in June, 1951, the School of Optometry in effect became the first optometry program to become a part of an academic health center. The influence of Dr. Sheard, who had close ties with both optometry and ophthalmology, as well as the close working relationships of Dr. Fry and Dr. Arthur Culler, then chairman of the Department of Ophthalmology, helped to influence this decision.

From top clockwise: Dr. Louis Warshaw videotaping lectures on public health optometry for presentation to classes; use of the fundus camera enables OSU to gather a wide library of photographs of eye diseases; videotaped presentations assist students in optometric analysis and diagnosis; students study materials on ocular anatomy; color microfiche helps in the instruction of eye diseases.







Dr. Culler, along with Dr. Fry, Dr. Carel C. Koch, and others, became part of an Interprofessional Committee on Eye Care, which tried to establish logical and harmonious working relationships between optometry, ophthalmology and opticianry. The positive influence of Dr. Culler was lost when in the mid 1950's he suffered an untimely stroke.

The School of Optometry continued to occupy space in Mendenhall Laboratory when, in 1957, the Ohio Legislature appropriated \$600,000 to build phase two of the Optometry Building, which was completed in 1960. At this time Ohio State had the most modern and complete optometry facilities anywhere in the world. However, since then, optometric education everywhere in the United States has moved forward at such an amazing pace that now these facilities are among the least adequate of any school or college of optometry in the country. However, these inadequacies will at least in part be relieved in the near future since the old medical out-patient clinic adjacent to the Optometry Building is now being extensively remodeled at a cost of roughly \$1.5 million for the College of Optometry. The College of Medicine clinics have recently occupied a new \$13 million building.

#### **New Academic Status**

In 1966, Dr. Glenn A. Fry was given the special rank of Regents Professor—one of only a handful in the University—which enabled him to devote his full attention to research and graduate teaching. Dr. Frederick W. Hebbard, a member of the faculty since 1957 and Associate Director of the School of Optometry since 1962, was named Director. One of the major accomplishments during his first year was the creation of the College of Optometry, which gave it equivalent academic status with the College of Medicine, College of Dentistry, and College of Veterinary Medicine. *Ohio State is the only university where these four major health professions are to be found on one campus.*

Although Ohio State graduates comprise only five percent of U.S. optometrists, they have accepted

*Continued on page 90*

# Tomorrow's Challenge

by William R. Baldwin

The written language of the Chinese uses two characters to symbolize the word CHALLENGE: one, the character for "danger," and the other, denoting "opportunity." At no time in its history has optometry fulfilled this double meaning of *challenge* as it does today. The forces of change are converging towards totally new concepts and systems of health care. Most of these forces are operating outside of and independently from optometric planning and influence.

We must adapt on the basis of projections of the world as it is most likely to become. Not only do we need to adapt to the changes in concept and delivery as they become clear, but we should also influence them. Never have we had a greater opportunity to establish for ourselves roles which will provide the most effective use of optometric services to the largest number of people. This is true, in part, because established roles are not considered as sacrosanct as they have been in the past.

Even though the tide of opportunity is at its crest, optometry is in danger of being cut off from the mainstream of future health care, or of being thrust into future systems as sub-professionals. Some of the danger results from uncertain answers to reasonable questions that are now being asked and for which answers will soon be established—by others. These include: What is the nature and quality of optometric education? What is the optometrist educated and trained to do for patients? (Not, what is he *licensed* to do?) What is presently the nature and quality of optometric practice? and, What is the most effective use of optometrists in future health care delivery systems considering present and potential training?

My view is that neither we nor our antagonists will be able to determine by persuasion how these questions are answered. If the answers are not to our liking, it may be because we have not achieved the quality and scope of education and practice that we convince ourselves we have earned, rather than because we have influential enemies.

I believe that we are just as prepared as other health professions to meet the demands of a program

which will provide total, comprehensive health care with emphasis on quality and prevention and that we should proclaim this. However, as we proclaim, we must see things as they are and establish the full credentials that qualify us even by the strictest measures of preparedness. This we are not doing well. We extol diversity in our educational programs, failing to modify the meaning to include only diversity of method.

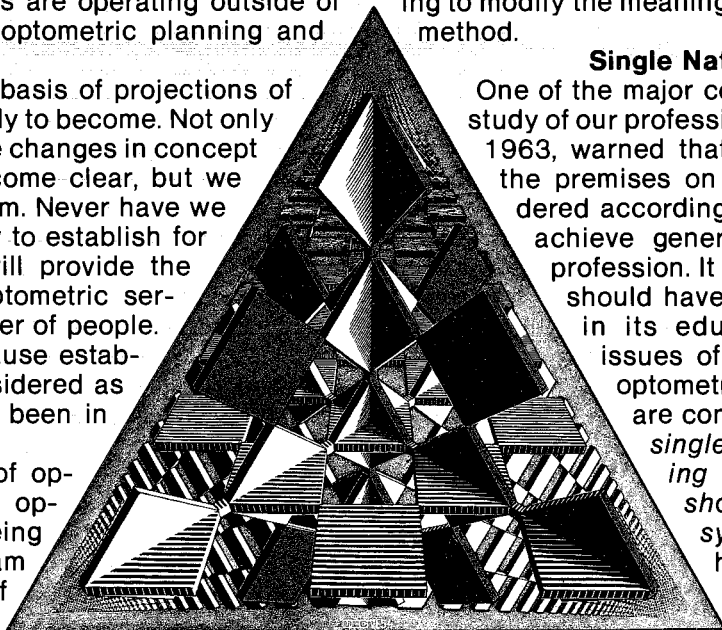
## Single National Purpose

One of the major conclusions of a preliminary study of our profession by an outside agency, in 1963, warned that optometry must organize the premises on which visual care is rendered according to theories and facts that achieve general acceptance within the profession. It seems clear that optometry should have strong national uniformity in its educational programs when issues of the nature and quality of optometric education and training are considered. *We should have a single national purpose concerning the roles that optometrists should fill in future delivery systems.* We are not likely to have significant influence on what these roles should be unless we have

uniformity of education and unless we speak loudly, lucidly and with one voice.

Consensus should not come without debate. It cannot come without thorough study of alternatives, planning and leadership. We have the structure of leadership in optometry. But we are not moving with sufficient momentum towards a well-planned or a well-organized consensus. Optometric leadership must develop the will to confront the pressing issues of the day. Certainly the capacity is sufficient and the responsibility clear. What is needed is: first, productive discussion to lay out specific premises upon which we operate; then, objectives toward which we organize and move as one force.

There have been many professional conferences focusing on these issues. One of these, AOA-sponsored Airlie House Conference of January, 1969, produced 78 resolutions, each of which received unanimous or near unanimous support of the optometric leaders present. Collectively, these provide



a comprehensive blueprint for action. But their influence on new directions for the profession has been limited.

Many ideas and recommendations have come from other conferences, but they have not yet been distilled into a logical, feasible, acceptable and comprehensive *action* program. Perhaps one of our problems in finding solutions which we can work toward in unison is that we have been looking at the parts, not as essential elements serving major objectives, but in isolation. Small plans developed now and again cannot be set easily on course nor are they likely to have significant impact on our future. We must develop without delay the *master plan* for optometry's future.

#### Potential Obstacles to Action

Four deterrents to action may continue to delay us:

1. Indecision because of the notion that leaders cannot lead but must wait for all constituencies to become informed;
2. Belief that the time for change is not ripe because we are developing *rapprochement* with the leadership in medicine;
3. Fear that we cannot achieve our goals;
4. Assumption that things are not really happening out there and optometry's niche is already established and secure.

Just as inaction is a major danger, so is failure to understand changes which will shape our future. Already, state laws have given way to national legislation in shaping the future of optometry. Principal examples are the various national laws creating federal support for health professions education. Current issues that receive widely varied interpretation among state legislative bodies must ultimately be made uniform through the U.S. Congress and the U.S. Public Health Service if optometry is to serve with maximum effectiveness in future national health care programs. *Among these issues are the scope of optometric practice, the modes of optometric practice, licensure and continuing examination of professional competence, the role of ancillary personnel in vision care and interprofessional cooperation in the care of patients.*

Elements of a national design for health care are already apparent. Emphasis will be on PREVENTION, QUALITY and COMPREHENSIVENESS OF CARE. National planners are already actively concerned with determining manpower needs, proper distribution of services, use of ancillary personnel, methods for early detection, methods for evaluating efficiency and quality and determining costs. The next major thrusts will be towards evaluating the quality of education and training, determining the role of the various professions, and establishing delivery systems.

The strongest assurance that optometry will be included eventually in the national health care plan lies in the fact that we represent a presence in the health care field of approximately 20,000 individuals trained to render needed services. To date, these services have not been specifically defined by the national health care planners, but the notion consistently emerges that optometrists merely measure the refractive state of the eye and provide spectacles to

improve visual acuity. Further, it is assumed, though manpower studies are woefully lacking, that there are not enough ophthalmologists to render this service and those which they are additionally qualified to render. Therefore, if the service is included (or, more likely, when it is included), optometry will participate. Another assumption indicating that optometry will participate in the future delivery system is that since optometric education is supported by federal funds, optometric participation in a federally-sponsored health care plan can be forecast.

These assumptions suggest some of the major dangers which optometry faces as its role is being considered. If the scope of optometric competence is misinterpreted and judged to be limited to refraction, our role will be very limited and participation possibly delayed because eyeglasses are not considered to be one of the higher priorities under national health services. (The provision of eyeglasses to persons who suffer no other health problems represents a substantial expense; thus, the possibility exists that this service would be excluded from the program, at least initially). In this respect, we will probably be dealt with in the same way as dentistry in its provision of dentures. Dentists are recognized to have other competences and to render valuable preventive as well as restorative health services not related to commodities or appliances. They will, therefore, likely be included in any national health program. If our capabilities were understood as well, our participation would be as likely.

If and when eyeglasses are included in the national health services program, and if the misconception concerning optometry's limited scope of competency prevails, we could be assigned a sub-professional role as refractionists and possibly dispensers—the latter along with dispensing opticians. Even if we can convince the appropriate authorities that we are competent to discover ocular disease or systemic disease affecting the eye or vision, our duties might be expanded but our role might not change.

While optometry now participates in all federal health care educational programs created by Congress, there is continuous and increasing pressure to make a case for greater needs and higher priority of funds for medical education. Medicine and dentistry, in the view of public planners, are considered to have established the fact that they suffer from severe manpower shortages. The other professions (except nursing) have not convinced that manpower shortages exist. The restricted role which optometry is generally conceived to be prepared to fill thus places us in double jeopardy in the consideration of our role in any new national health plan. Not only is refraction a relatively low-priority service, but, if optometrists are limited only to providing this service, fewer optometrists will be needed.

#### Need to Mobilize and Educate

Our basic weakness is that we have failed to enlighten the national health care planners concerning the education of optometrists and the appropriate scope of optometric practice. Our educational programs do, in fact, vary in purpose and in quality—and the scope of those optometric practices that are most visible is often limited to refraction and the dispensing of spectacles. Unfortunately, this may also be true of all too many of the less visible practices. As we strive to acquaint the decision-makers in HEW

with what the best in optometric education should be and what this adequately prepares optometrists to do in the case of patients, we must also mobilize nationally to educate and to practice in the manner that we preach.

Planning for optometric education cannot wait for optometry's master plan to emerge. Estimates must be made now concerning future optometric roles which today's students will fill. ASCO's current planning is premised on the axiom that *the nature of the education of health professionals determines the nature and scope of their practice*. Growing disenchantment with existing ways of education, analysis of problems and educational reform are cyclical events as well as a continuing undercurrent in each health profession. It is by such evolution that professions change.

***"The new role of the optometrist ... should be to bring all of the knowledge of visual science ... to bear on the improvement of human potential."***

Optometric education is in the midst of perhaps the most significant soul searching in its history—or future. Causes and contributing factors to this development are both *internal and external*. Optometry was born of a combination of technological achievement in lens making, growing demand occasioned by educational and industrial progress, and by failure of existing social groups to apply new knowledge to meet new demands. Early progress in optometric education has been within this framework. But now, new opportunities for professional services exist because new knowledge of vision permits more extensive and refined evaluation of visual function and the identification and solution of more human problems associated with vision. The time span of optometric education and the range of study of visual science and related subjects has expanded. Larger numbers of highly-qualified students are seeking to become optometrists. Substantial new resources have been infused into the education of optometrists.

External social changes also add to opportunities for change. A new national mood pervades the analysis of health care and planning for its future. No longer are the best interests of consumers to be submergled by an aura of mystery created by providers to serve their self interests. Demands of quality, scope, accessibility, early discovery and preventive treatment have a new urgency and new authority. In such a climate, critical self-analysis and attempts to discover new ways are a mandate to the profession.

The urgency of committing optometric education to new designs, higher standards and greater challenges is perhaps at its peak. Failure to make

such commitments now may well condemn us to retrenchment rather than restructuring even as the opportunity for change is at the crest. While there is now no coherent plan, nationally-instituted systems for planning are being reorganized in response to the deep national sense of need for new ways. We must make known our commitment to meeting national needs.

### **Defining Professional Objectives**

The primary mission of optometry schools is to create professionals who will practice optometry—which may be defined as the application of knowledge and professional insight in the service of patients who present visual symptoms or who seek information concerning vision. In addition, the practice of optometry should involve activities not directly associated with vision care but which serve to *maintain and improve the general health of patients and to promote community health*.

To design the future of optometric practice, one must be guided by present and potential educational resources and by present and future needs. No plan can be implemented unless current optometric educational resources can be restructured and expanded to prepare optometrists for selected patterns of practice. Efficient implementation of the design proposed herein requires (1) that the quality of entering students be maintained or improved, (2) that optometric educational institutions coordinate certain optometric teaching with units of academic health centers, (3) that substantial new funds be invested in the education of optometrists, and (4) that certain existing traditional attitudes concerning the role of optometrists be overcome. These are formidable tasks, but I believe the social value of achieving competent practitioners who fulfill the proposed role is worth the major concerted effort which will be required.

*The new role of the optometrist, broadly stated, should be to bring all of the knowledge of visual science that is applicable to bear on human problems and on the improvement of human potential.*

The education and training of optometrists does not and is not contemplated to include the treatment of intraocular disease by chemotherapy or surgery; therefore, the differential diagnosis and medical treatment of these conditions is outside the realm of optometric practice.

However, because the optometrist is a first-contact professional who primarily attracts patients who have visual symptoms, it is considered important that he be competent in the early diagnosis of the presence of ocular disease and systemic diseases displaying ocular symptoms and that he make competent judgments concerning referral of such patients. It is also considered that all first-contact professional should be trained and oriented to screen for general health problems which have high incidence, low early visibility to the person afflicted, high preventability when detected early, and for which effective early detection methods are available.

The general optometrist's responsibility to patients then can be divided into four major categories:

- A. To diagnose, treat and counsel concerning vision problems of high prevalence;
- B. To recognize and refer unusual vision prob-



lems to optometrists with specialized education and experience;

- C. To screen for certain high incidence general health problems
- D. To diagnose health conditions which portray visual and ocular clues, signs and symptoms, but which are treated effectively by other health practitioners—and consequently make appropriate referrals, providing follow-up care and management when advisable.

Three conclusions derived from the above are that (a) the optometrist will function as general practitioner of vision care, (b) that close cooperation with other health practitioners is essential, and (c) that certain optometric specialties must be developed to deal with special problems which, while not seen often in general practice, are sufficiently frequent, complex and treatable to justify the special education competency and instrumentation necessary to their most effective care.

#### **A Major Change Proposed**

*A major change in scope of practice projected is the responsibility to screen for certain general health problems.* Such action naturally raises questions about licensure and whether or not current laws would need to be changed to legitimize the proposed expansion of optometric practices. In arriving at answers to these inevitable questions, it should be kept in mind that the boundaries of professional practices are determined by education and training. Professional and regulatory agencies—as well as laws—are most often concerned with keeping the activities of a profession within its boundaries.

Optometric regulatory laws and procedures should be clearly and simply dedicated to making certain that optometrists do only what they are educated to do. However, they have a purpose equally important; they should ensure that, within the limitations imposed by education and training, the profession should have maximum freedom. Given this condition—freedom to engage in all of the activities for which educated and trained—optometrists should be held fully accountable for the interests of individual patients and of the public they serve *within the boundary of activity set by their education and training.*

Viewed in this perspective, no massive restructuring of state licensure procedures should be required—but more definitive instruments for measuring the accomplishment of professionally-adopted objectives may be needed. This represents no obstacle in my mind—indeed, expanded definitions and clarifications of licensed procedures would seem to follow naturally, just as expanded practice modes will evolve as a matter of course from the implementation of proposed educational models.

The proposed design for implementing innovations into the optometric education system which will produce the type of optometric practitioner previously described, incorporates guidelines for development of new schools, along with adoption of a national curriculum model.

#### **New Schools**

The need for more optometric manpower is clear. Based on the Optometric Manpower Profile developed by AOA, we must maintain a level of

almost 1500 optometric graduates a year through 1990 in order to assure a ratio of one optometrist per nine thousand population (1:9,000) at that time. While this falls far short of the AOA-adopted goal of one per seven thousand (1:7,000), even this objective will be very difficult, if not impossible, to achieve.

Approximately 1500 optometrists per year will be leaving practice in the mid-1980's due to death or retirement. This results from the fact that during the period 1949 to 1954, the yearly number of graduates from all U.S. optometry schools was the greatest in our history. If we achieve this almost impossible goal and begin, as early as 1980, to produce 1500 optometric graduates per year, the ratio of optometrists to population in 1990 will be approximately the same as that which existed in 1960 (1:9,108), and less than existed in 1950 (1:8,506). Even under the best

***“Current projections indicate the need for twenty-five schools of optometry in the United States by 1981—each with an average class size of sixty students.”***

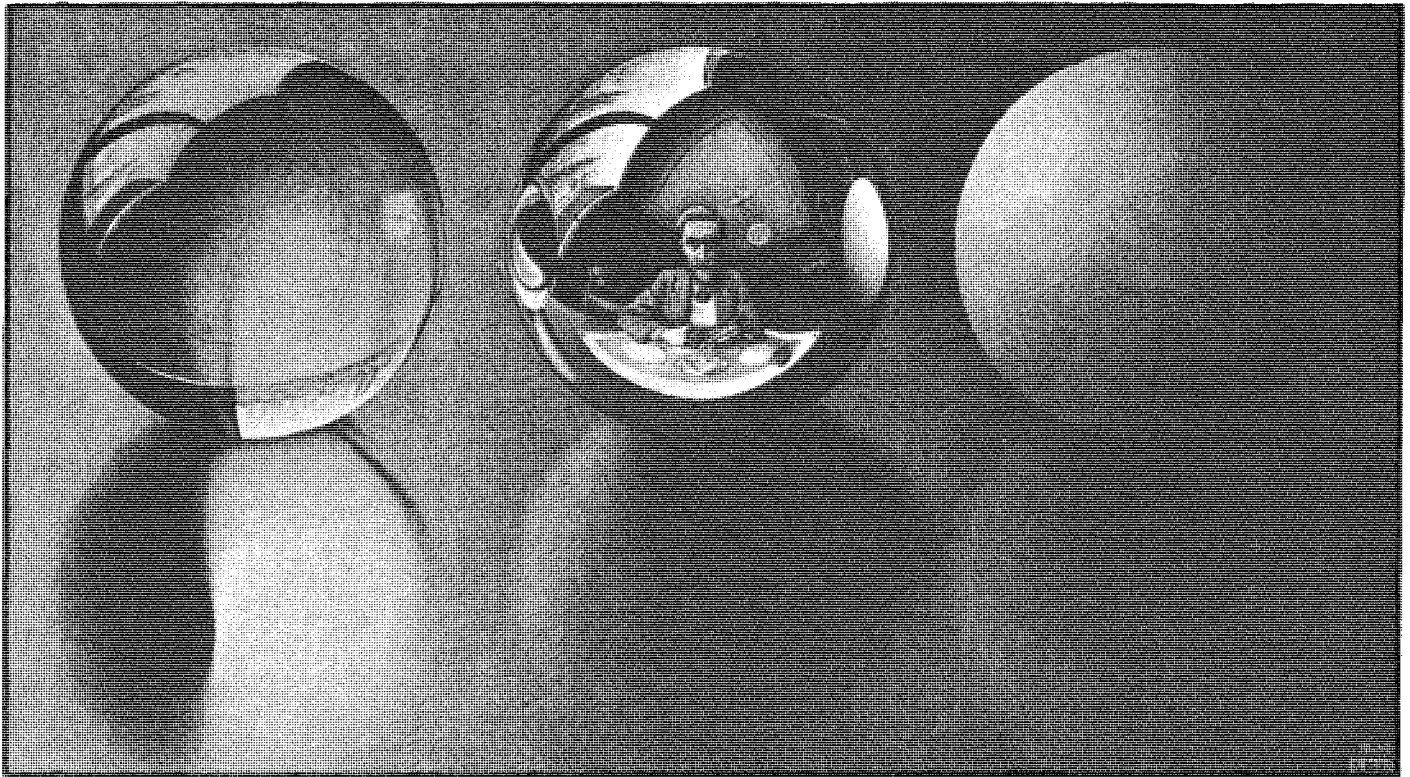
circumstances then, optometric manpower is unlikely to show anything like the kind of growth necessary to meet future needs.

Other important factors in estimates of future manpower needs include increased demand for vision and health care services which would result from federal commitment to make comprehensive health care available to all citizens and from expanded functions of optometrists resulting from new knowledge and new technology and from anticipated expanded roles as primary health care practitioners.

How can we best solve this serious problem? All but a very few of the existing twelve schools of optometry have expanded enrollment so that they are now beyond optimum size based on available resources. Even so, the number of graduates projected for 1978 is approximately 980.

If we consider bringing existing schools to optimum size based on the needs of the constituencies which they serve and upon their resources, the average number of students per school would be somewhat less than it is now. Planning for meeting the goal of fifteen hundred graduates per year by 1985 is being carried out by the Council of Institutional Affairs of ASCO. Current projections indicate the need for twenty five schools of optometry in the United States by 1981 each with an average class size of sixty students.

There are two overriding reasons why there should be twice as many schools as exist now rather than twice as many students in each school. First, we must recognize that in the predictable future optometric education can only be financed adequately if it is partially supported by funds through state leg-



islatures. Presently only six of the twelve optometry schools are affiliated with public state supported universities. Two additional schools, Southern College and Pennsylvania College, receive funds appropriated by state legislatures. Southern College from contracts with fifteen states which partially support the educational costs of their own residents, and Pennsylvania College from a direct appropriation from its own state legislature. When distributed on a pro-rata basis among the total student population in schools however, these funds are far from sufficient to provide adequate operating budget assistance, let alone capital funds. Therefore, to gain state funds in amounts necessary to support optometric education nationally, private optometry schools must become public, and those states with substantial needs for optometrists must develop new schools. Theoretically, optometry schools could exist adequately in private universities if these institutions were sufficiently endowed, or if they receive sufficient financing from other sources to maintain adequate programs. However, no existing private optometry school has such resources, nor is it likely that private universities meeting these criteria can be encouraged to develop new high cost programs such as optometry.

Secondly, optometry schools need to be well distributed geographically to help serve continuing education needs and other important professional missions. They need to be affiliated with major academic health center education programs in order to provide comprehensive health delivery models and educational efficiencies inherent within these environments; they need to exist in universities which have strong health care and basic visual science research resources so that they can contribute to and draw from related research capacities

of others; and they need to contribute their influence to planning for optimization of health planning and improvement of professional services in all areas of the country.

We believe that it is important that this substantial number of new schools needed to keep our manpower supply from dwindling should be created according to criteria based on national planning. The Council of Institutional Affairs has developed such a plan. We hope optometry will mobilize to implement this plan just as soon as possible. ASCO has also developed guidelines indicating criteria which should be considered in the development of new schools of optometry. These include the need to locate in a comprehensive academic health center environment, the guarantee of state financial support, availability of patient populations of sufficient size and variation, and interdisciplinary relationships in teaching research and patient care.

#### **A Curriculum Model For General Practice**

The Council on Academic Affairs of ASCO has been at work for eighteen months to develop a curriculum model which is appropriate to our best estimate of the future role of optometry. They have determined that this curriculum must be designed in terms of what the general practice of optometry is to be. As in other fields of health science, the general practitioner should be concerned with all problems in his field which have high prevalence, which do not require rarely used and expensive instrumentation and diagnosis and treatment, nor extensive special education in the development of competence. The general optometrist is a primary health care practitioner; because he represents a point of entry into health care he should have competence to identify health problems which can be ameliorated by other health professionals.

We identify then two major areas of professional responsibility. One derives from the fact that optometry is that profession which applies knowledge of visual science to human problems and human potential. This knowledge is applied to the diagnosis and treatment of conditions which are categorized under the following divisions of primary optometric care:

1. Refractive and accommodative conditions
2. Problems of motility and binocularity
3. Sensory and integrative vision problems
4. Conditions of visual environments
5. Involvement of vision in other behaviors

One major responsibility of optometric education is to provide unique training, education and experience which lead to understanding in dealing with the above conditions. No health profession, other than optometry, will possess this combination of competencies. *No other health profession will develop extensive insights into any one of them.*

If patients came to optometrists only because all possibilities of health problems, other than optometric problems, had been ruled out, their responsibilities to patients would be limited to those above. Rather, optometrists are very likely to continue to function as first contact health professionals; therefore, the second major portion of their professional responsibility derives from the fact that they are primary health professionals as well as optometrists.

Patients can therefore expect that optometrists will recognize non-optometric health problems which they might not themselves discover but which require attention from other health professionals. Communities in which optometrists work also have the right to expect that they will provide leadership in health planning, health education, and health administration. Knowledge necessary to fulfill these professional responsibilities is classified under the following divisions of other professional responsibilities:

1. Ocular Health Assessment
2. General Health Assessment
3. Health Counseling
4. Health Education
5. Health Administration

In each of these areas optometrists will cooperate with other health professionals in serving the best interest of patients and other publics. Treatable ocular disease will require consultation with ophthalmologists. Discovery of other health problems will lead us to make certain that patients are directed to other appropriate practitioners. Our knowledge of genetics, nutrition, and other scientific concepts affecting patients' health and welfare will often permit us to provide valuable counsel to patients. We have responsibilities not only to patients but to local and larger communities to provide leadership which will help prevent vision impairment, promote public awareness to good vision and general health practices, and to participate in community activities and events which support good health practices. The administration of health care represents an area of knowledge which each health profession has responsibilities to develop.

The ten categories above represent the ten major study units which have been circumscribed as necessary elements in the preparation of optometric graduates of the future. The Council on Academic Affairs is now working on the next step—defining content in each subject area. Every educational topic and activity must be measured in terms of its importance and relevance to one of these units of study. Whether academic divisions are based on divisions of basic health sciences, visual sciences, and patient care, or, whether attempts are made to organize academic units around the circumscribed subject areas in the final development of a model curriculum is less important than are the criteria of priority and relevance to the behavioral goals of mastery of knowledge and competence in its application to human needs.

### **Optometric Residencies and Optometric Specialties**


Two conditions are necessary to assure competence in treating given conditions—knowledge and experience. If knowledge—beyond that made part of the general optometric curriculum—and experience—beyond that available from general patient populations—is required, some optometrists should be educated and trained to deal with such problems. The latter is probably a more persuasive reason for developing specialties in optometry.

ASCO formed a special committee to study requirements for residencies in optometry. The Committee recommends that it is appropriate to establish general residencies of varying periods of time. These should be employed primarily to give optometrists intensive training in specific procedures such as contact lenses or visual training. They should also be developed to provide intensive experience with special population groups such as mentally retarded or elderly. General residencies should not lead to certification or special designation.

The Committee also determined that three types of residency programs should be established which could lead to special certification. The criteria on which these three specialty areas are based are:

1. Any specialty area should include a body of scientific knowledge applicable to patient care which needs to be more extensively covered than it is in the O.D. curriculum.
2. Conditions treated must be rare enough so as not to provide consistent experience for general optometric practitioners, but frequent enough to require the full time efforts of practitioners operating within appropriate patient population areas and seeing patients almost exclusively upon optometric referrals.
3. Conditions delegated to an optometric specialist should be differentially diagnosable (as opposed to tentative or presumptive) and appropriate treatment methods must be available.
4. While education and clinical training must be more extensive than that available to students in general optometric educational programs, they must be available within the academic environment of optometry.

*Continued on page 89*



# Teaching Health Care: Under One Roof

*The following is an informal conversation with Thomas W. Mou, M.D., the Provost for the Health Sciences of the State University of New York (SUNY). As health provost of that large educational complex, Dr. Mou, along with his colleagues, has coordinating and staff responsibility for four medical schools, two dental schools, a pharmacy college and a college of optometry as well as a school of podiatric medicine, a college of veterinary medicine, some forty schools of nursing and many allied health programs.*

*The **JOURNAL OF OPTOMETRIC EDUCATION** invited Dr. Mou's comments after hearing his presentation at the December, 1974 meeting of the American Academy of Optometry in Miami Beach. At that time, he discussed, among several items of interest to the profession, the ASCO guidelines for the development of new schools of optometry which were adopted in September, 1974.*



**What impact will the proposed national health insurance have on professional health sciences education, in your estimation?**

Let me briefly talk about the health sciences professions overall and their changing approaches to education and patient care. Those of us who are involved in health sciences education must be mindful of these evolving changes. For example, we all know of the hospital-based strengths of medicine and nursing. Dentistry, pharmacy and podiatric medicine also have hospital roles. In recent years, the allied health professions have assumed a larger role in our hospitals—the medical technologists, physiotherapists, occupational therapists, and

respiratory therapy technicians, to name a few.

However, in the future, a much greater proportion of the health care provided, including optometric services, will be delivered in an ambulatory, out-patient setting, presumably financed by a comprehensive national insurance plan.

Our educational process will need to further orient all health care professionals, including physicians and nurses, to function efficiently in an ambulatory setting. The dentist, the pharmacist, the optometrist and the podiatrist, as well as the public health nurse and others, have had more experience in the ambulatory setting.

*In my view, there is great need to provide good settings for integrated educational opportunities in the health professions. There is the hope that if we educate the professions together, they will then eventually work together. At present, this tends to be true more in the theoretical than the practical, but a portion of this problem may reside in present faculty, administrator and practitioner attitudes rather than student attitudes. We need to create settings in which the health professions faculties and students can learn together, work together and develop respect for each other. This is one reason I am fully supportive of the concept of academic health sciences centers—where a wide range of health sciences educational activities are conducted in a university setting.*

## **ASCO Guidelines For New Schools of Optometry**

This statement is prepared to present the conditions the Association of Schools and Colleges of Optometry holds important to the development of new schools.

1. Under appropriate conditions, the most advantageous location for a new school or college of optometry is in the academic health center of a state university.
2. Optometry should have separate status as a professional school or college, administratively on the same level as medicine and dentistry, within the health center.
3. There should be strong central administrative support for the school or college of optometry and commitment to interdisciplinary development and interaction.
4. There should be shared basic health science programs for students of the health professions where appropriate.
5. There should be the opportunity for development of optometric clinical services in the various patient care facilities of the center.
6. There should be the opportunity to develop interdisciplinary research programs of mutual interest.
7. There should be a commitment to graduate and continuing education for the further development of practicing optometrists and future educators.
8. The size of the entering class of professional students should be approximately 60 students.
9. The school should be located in a community of at least 200,000 population to provide an adequate clinical base for the program.
10. The school should, where possible, be a regional resource for the development of optometric manpower and vision care referral service.
11. There should be a commitment of both adequate capital funds and operating support to provide for the orderly development of a program of excellence in optometric education.
12. There should be an established faculty-student ratio of not less than one faculty member per five students.

Of the several health professions, medicine and nursing probably have the greatest integrative responsibility. Optometry deals with one organ system, dentistry with another, podiatry with another. Pharmacy has a defined and expanding role in the health sciences. But medicine, as it has become amazingly complex, has lost some of its ability to integrate for good patient care. With specialization, medical specialties limited to specific organ systems have occurred. This development focuses on the great need for integrated education.

If students are to fulfill their roles to the maximum of their capabilities, they must understand and communicate effectively with their colleagues in *all* health professions so that patient care—the principal goal of the health education process—will be the most efficient possible. We must have a better perception of what other members of the health professions team can do and we must integrate the strengths of *all* if we are to survive the demands that national health insurance will place upon us.

**The concept of integrated health professional education which you describe has been gaining support in the past decade. As you are well aware, optometric education has made great strides in the recent past as well. The new schools guidelines (printed**

here) adopted by ASCO, and subsequently by the AOA's Council on Optometric Education, represents not only an endorsement of integrated education, but also a blueprint for the future education of optometrists. Would you give us your reaction to the policy statement?

I have several points to make about the guidelines, but first, a brief statement about my association with optometric education, past and present. I have been involved, of course, in the development of the SUNY College of Optometry. About the same time as the establishment of that optometric program (1971, 72) I became more active in the Association for Academic Health Centers (AAHC),\* serving as chairman of the Liaison Committee on Optometry. Through that committee, I have had the pleasure of working with many distinguished optometry and ophthalmology educators—too numerous to mention individually, but every one helpful and concerned about the important issues. As you know, the AAHC Liaison Committee on Optometry prepared some working concepts about the relationship between ophthalmology and optometry. These were drafted a little more than a year ago, and I will address them also, since they have much relevance to your question.

The ASCO guidelines on new schools and colleges of optometry, viewed in entirety, represent a significant "working paper" in a complex policy-making process. More specifically:

**Item #1** should enable some universities and academic health centers to accept the concept that optometric education should be in a university setting as a full participant in the academic environment.

**Item #2** would then allow optometry to have its own "three-leg-

ged stool" of teaching, research and patient care.

**Item #3.** The sharing of basic science instruction with the other health sciences is important and timely—and an appropriate vehicle for accomplishing a learning association among students.

**Item #4.** They will then learn of the capabilities of their colleagues in the other disciplines, the benefits of which have already been emphasized.

**Item # 5.** The sharing of clinical experience is also very important in providing the optometry student with an insight into the responsibilities and capabilities of the other health professions. In turn, students and faculty in other health professions will learn of the optometry students' capabilities.

**Item # 6.** The concept of interdisciplinary research programs is, in my view, one of the most important areas to which optometry must address itself. Graduate programs in the field of physiological optics, for example, should withstand the same rigorous review as a program in the department of biochemistry or anatomy or microbiology.

**Items 7, 8.** The setting for optometry must certainly be in a major urban area and there must be continuing education for the practicing optometrist, just as there should be continuing education in every other health profession.

There are other statements on education by the optometry college deans that will need further consideration. These are issues of a separate school, a specific class size, a regional resource, and a specific faculty/student ratio. The concepts expressed in those statements will need further discussion.

Now, let me compare the deans' concepts with those of the Liaison Committee of the AAHC. At least five of the committee's "working paper" observations appear to complement the statements of the ASCO deans, and the remaining three are compatible. This I find very encouraging.

First, the professions of optometry and ophthalmology are both primary entry points into the field of eye and vision care.

Second, the professions of optometry and ophthalmology recognize and subscribe to the concept that each has the right to exist as

an independent and cooperating health care profession.

Third, the purpose of an increase in the biomedical base of optometric education is to better prepare the optometrist to perform his functions, including appropriate referral of patients to ophthalmologists and other health professionals.

Fourth, that the optimal educational environment for a school of optometry is *within an academic health center*.

The fifth has to do with pharmaceutical agents. "Any utilization of pharmaceutical agents by optometrists is for the purpose of improving recognition of conditions requiring referral for appropriate medical or other health services. It is not for treatment of any health problem. Utilization of diagnostic agents assumes the local legal authorization and professional liability for their use."

Sixth, the committee proposed that it is in the best interests of the public and both professions for ophthalmologists and optometrists to train technical assistants under mutually acceptable guidelines for their supervision and control.

The seventh states that *increased* participation by each profession would enhance the educational programs of both ophthalmology and optometry.

And finally, statement eight recommends that there should be quality assurance of appropriate referrals established by participation of ophthalmology and optometry in a review mechanism to identify needs and to implement programs for continuing education.

Taken together, the ASCO and the AAHC statements represent two very important steps forward. They appear to me to be rational and logical developments for the future of optometric education. Therefore, I commend both of these developments as significant, not only to optometric education, but, in turn, to the practice of optometry.

**In what ways can optometry—both educators and practitioners—facilitate the necessary changes to ensure full participation in the integrated health professional team approach to health care delivery?**

*Continued on page 83*

\*The AAHC, located in Washington, D.C., is composed of presidents, vice-presidents and provosts of academic centers. For AAHC purposes, an academic health center consists of at least a medical school, a teaching hospital, and one other major health science school, such as dentistry, nursing, pharmacy or optometry.

# Health Care-

Continued from page 82

Let me answer that by first pointing out some other important developments. Members of your profession are already involved with various regional higher education bodies in developing new schools according to the ASCO-adopted guidelines, as well as attempting to generate more state support for existing optometry schools. For example, the Southern Regional Education Board (SREB), after a major study of optometric education in fourteen southern states, has recommended the development of a limited number of new optometric schools, regionally located, and that they conform to the guidelines adopted by ASCO and the AAHC.

Similarly, the New England Board of Higher Education is examining its responsibilities and the role of the six New England states in providing for optometric education.

In addition, the State of Virginia has appointed a special committee to study the need for optometric education in that area. It has been my pleasure to be involved in the three studies, to a varying degree, as have Drs. Peters and Baldwin, of the Alabama and Massachusetts optometry schools, respectively.

It seems then that this is an interesting time for optometry. There is ferment, excitement and action that is healthy.

Your profession has excellent educational leaders, superb organizational leaders and effective accrediting groups. I urge you to support their wise decisions while overruling any self-serving or "turf-protecting" attitudes. Keep your professional relations strong, both within and outside of optometry. Make sure your educational institutions maintain and improve the quality of programs that now exist and strive to ensure that optometric institutions are in the "right places" for their future roles.

Academic acceptability, research accomplishment and multi-professional health care programs can be achieved by intellectual rigor and objective evaluation of competence by all professions. This is the course you appear to be following.

I am indeed grateful to receive a copy of your new periodical, *Journal of Optometric Education*. Optometric education is of vital concern to me. It is most essential that we in Congress continue our fight through legislation for adequate funding of these professions.

Thank you for writing. Please continue to keep in touch with me about optometric education legislation.

Edward W. Brooke  
U.S. Senator  
Massachusetts

Secretary Weinberger has asked me to thank you for your letter of February 25 with which you enclosed a copy of the first issue of the *Journal of Optometric Education*. We are most impressed with this first issue and look forward to the contributions which the Journal will make in the future to optometric education.

Thomas D. Hatch  
Director  
Division of Associated  
Health Professions, HEW

Thank you for sending me a copy of Volume 1, Number 1 of the *Journal of Optometric Education*. I would like to add my compliments to the many I'm certain you have already received on your excellent publication.

All best wishes for your continued success.

Mrs. Mildred Yarrington  
Executive Secretary  
The Auxiliary to the  
American Optometric Association

Many thanks for sending the first copy of the *Journal of Optometric Education*. Please give my congratulations to Dr. Baldwin, President, and also to the Board of Directors, Editorial Council, and Advisory Committee on this notable educational advance.

I have read the papers and special features with very considerable interest and I shall look forward to the next edition. There is a need for greater educational liaison in optometry on a world-wide basis and I welcome your project.

G.V. Ball  
Professor and Head of Department  
Department of Ophthalmic Optics  
University of Aston  
Birmingham, England

# LETTERS

I am impressed! What a fantastic beginning. Your Journal is not only a beautifully conceived, excellently laid out publication but a prestigious addition to the literature of the profession. The heads are attractive; your use of color in good taste; and your illustrations truly professional. The image portrayed by *Optometric Education* can only be enhanced by the new *Journal of Optometric Education*.

Milton J. Eger, O.D.  
Editor, Journal American Optometric Association

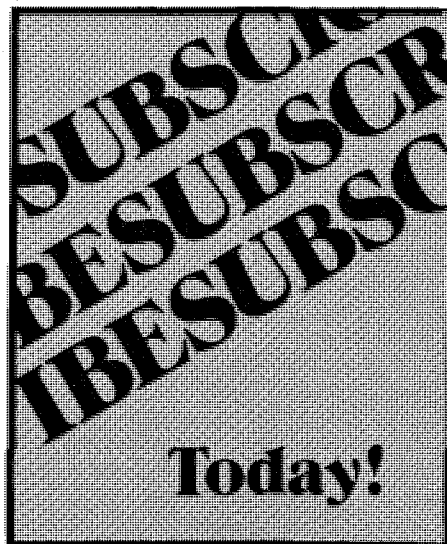
Just a note to let you know that I read the first edition of the *Journal of Optometric Education*. I find your new venture both interesting and informative. I am certain that it will be valuable to the members of the profession.

Thomas M. Rowland, Jr.  
President  
Philadelphia College of  
Osteopathic Medicine

Thank you very much for sending me a copy of the first issue of your new *Journal of Optometric Education*. The Journal is a lively document containing articles of much interest and I am very pleased to learn particularly about the Pennsylvania College of Optometry.

Please accept my congratulations for this outstanding effort and best wishes for continued success.

Darrell Holmes  
President  
East Stroudsburg  
State College (Pa.)



# Parent Guidance:

## An Integral Part of Vision Therapy

By J. Floyd Williams

The Parent Guidance Clinic of the University of Houston's College of Optometry (HCO) was recently re-designed and re-programmed to involve both optometric faculty and students to make it an integral part of the vision therapy services and optometric training opportunities offered by the Optometry Clinic.

Group therapy procedures were instituted which may make vision therapy service more economical for both the practitioner and parents. In addition, the interaction of parents, children, and student clinicians in an informal clinical setting has built student confidence to advise and guide both parent and teacher groups once in practice. It had been this lack of confidence, plus high costs, which had limited students' utilization of vision therapy procedures which had been developed. The revised program has been well-received by parents in Houston and surrounding communities.

What follows is a detailed description of the program, including: (1) goals of program, (2) student requirements, (3) faculty commitment, (4) clinical procedures and (5) program content.

### Goals of Program

The primary function of the HCO

*Dr. Williams is Assistant Professor of Optometry at the University of Houston, College of Optometry. The author wishes to acknowledge the contributions of the following in re-designing the HCO Parent Guidance Clinic: Drs. Morris Berman, Dennis Levi and Steve Virgilio.*

Parent Guidance Clinic is to provide additional unique training opportunities for optometry students. At present, the student's ability and opportunities to counsel patients and parents relative to vision therapy and vision development activities are limited. The Parent Guidance Clinic provides an excellent opportunity for students to gain this much needed experience. Previously, students had few opportunities to develop and practice group therapy techniques. Now, optometry students direct and supervise groups of patients and their parents in therapy routines. With this kind of experience, students gain confidence in directing parents and patients in home therapy practice, and develop communication skills so necessary for a well-educated professional.

Program evaluation, an important aspect of any clinical program, is accomplished concurrently with the collection of clinical research data. Vision Development Evaluations provide extensive pre-therapy diagnostic workups. Post-therapy evaluations are routinely scheduled to analyze the impact of the program on our patients.

As a by-product of all clinical teaching programs, community services are made available. In HCO's case, the Parent Guidance Clinic provides important support to our Vision Development Evaluation Clinic. Each year approximately 500 Vision Development Evaluations are performed by students. Remedial procedures are recommended for approximately 80% of these patients. HCO's Vi-

sion Therapy Clinic, at maximum utilization, can provide therapy opportunities for only 200 Vision Development patients per year. The Parent Guidance Clinic fills an important gap, insuring a reasonable amount of continuity in patient care. The program specifically provides home therapy routines parents may utilize to develop and enhance visual and visuo-motor perceptual abilities, as well as associated perceptual motor skills prerequisite to effective learning. More generally, the program presents selected topics of a public information nature for the parents.

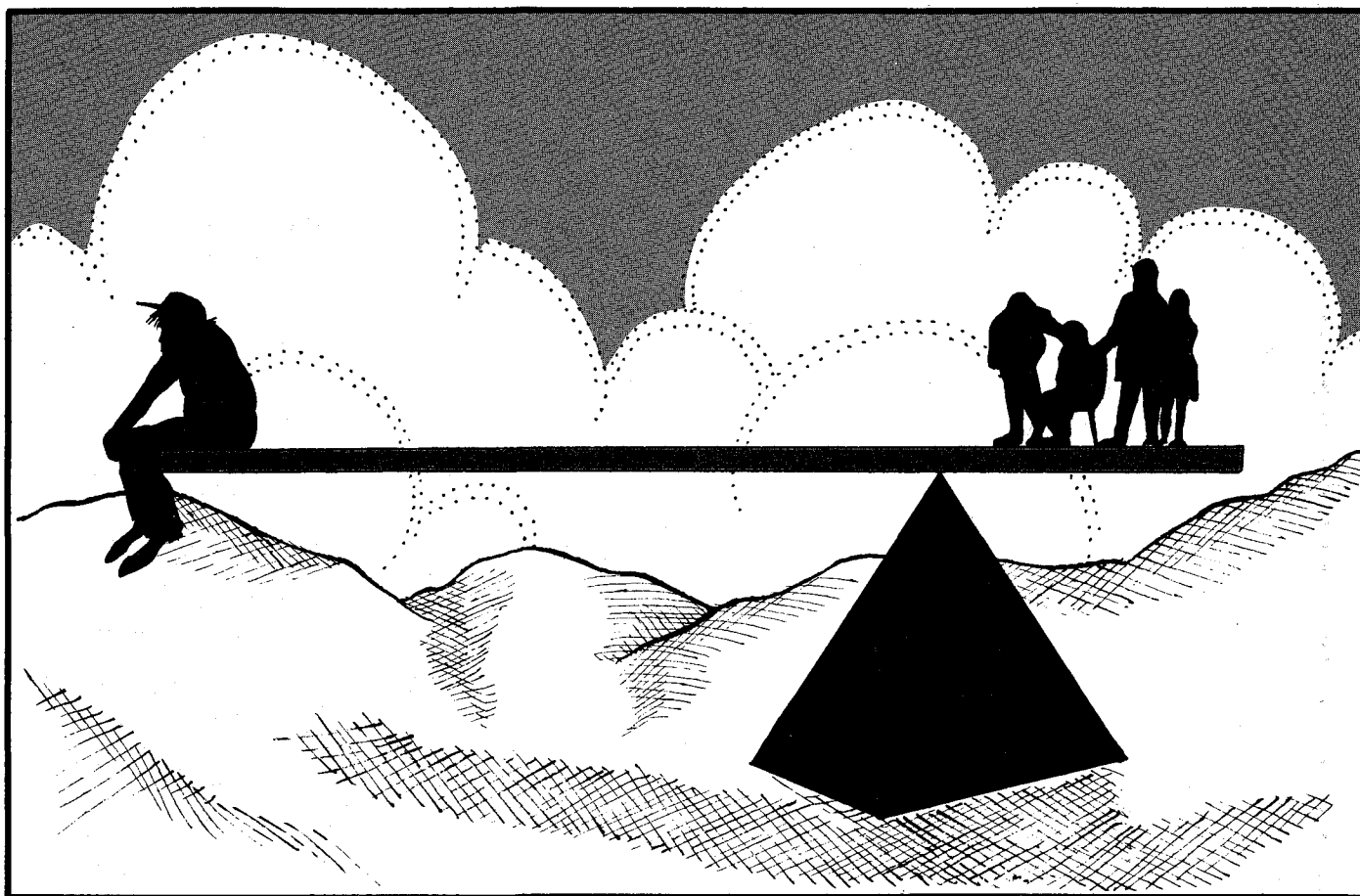
### Student Requirements

Training opportunities for both third and fourth year optometry students are available. Each Optometry III student clinician is required to work in the Parent Guidance Clinic for a single month during one semester. During each student's tenure, he/she is expected to participate in eight parent/patient therapy sessions (1 1/2 hours each) and three or four parent seminar sessions (1 1/2 hours each). Each student provides close direction and supervision of patients as therapy routines are administered.

Optometry IV student clinicians may elect additional experience in Parent Guidance as an area of concentration for one semester. The Optometry IV students supply close support for the Optometry III students, plus assistance in the direction of the parent seminars.

In the future, the use of optometric assistants in the Parent Guidance Clinic will be a desirable





educational experience for both the assistants and the optometry interns.

#### **Faculty Commitment**

One faculty member (1/4 FTE) directs the program and when practical, this clinical duty is rotated on a semester basis. Faculty advise all students of the program outline and assign each student specific reference material to be presented to the parents. The key element of the program is "learning by doing". This has been true for parents in the past, and is the rule for students now and in the future. Faculty give guidance to all students on group therapy procedures and are available for parent consultation. To improve the effectiveness of the program, individual therapy protocols are prepared for each patient by the student clinician based on the original Vision Development Analysis, at the direction of the faculty.

#### **Clinical Procedures**

Only patients referred by the Vision Development Evaluation Clinic are accepted for the Parent Guidance program, although educators and interested parents may observe and participate as

clinical space is available. A fee of \$20.00 per family is charged in advance, refunds are allowed only with significant advance notice of cancellation. Daily therapy protocols are kept for each patient, plotting the type of therapy and time spent in each activity. Rather than administering a variety of therapy activities to each patient, specific therapy programs (based on the original vision development diagnosis) are designed by the students for each patient to increase the program's effectiveness.

#### **Program Content**

The program provides both specific and general information for the parents. Specifically, the parents are instructed in the administration and supervision of home therapy routines designed to remediate, develop, and enhance the visual, visuomotor, perceptual, and associated perceptual-motor abilities which are prerequisite to efficient, effective learning. To accomplish these goals, there are several well-designed programs which may be called upon, or the Vision Therapy faculty modifies programs presently utilized in school programs

which are directed by optometry students.

In general, the parent seminar sessions are used to develop and discuss a wide variety of topics—the most important being the definition of the problem and associated behaviors—such as etiology, remediation, and optometry's philosophical and clinical approach to the problems of learning disabilities.

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#### **REFERENCES**

Resources for the HCO Parent Guidance Clinic program are:

*A Motor Perceptual Developmental Handbook of Activities*; Belgau, Frank A.

*Motoric Aids to Perceptual Training*; Chaney & Kephart

*Steps to Achievement For the Slow Learner*; Ebersole, Kephart, Ebersole

*Pictures and Patterns*; Frostig, Marianne

*How to Develop Your Child's Intelligence*; Getman, C. N.

*Developing Learning Readiness*; Getman, Kane, Walgren, McKee

*The Slow Learner In The Classroom*; Kephart, N. C.

*Training That Makes Sense*; Kirshner

*Strictly For Parents*; Golick, Margaret

*Developmental Learning Materials*

# VA Training-

Continued from page 62

started out as wings or floors of existing VA hospitals.

It appears to the author that most past failures to develop eye/vision care teams can be attributed to both an intra-VA ignorance of modern optometry and to optometry's ignorance of the VA. Too often an optometry school has, when approaching a VA hospital, failed to first meet and work with the ophthalmology department and other hospital staff, and it would then appear to ophthalmology staff that optometry was "trying to pull a fast one" or to practice medicine. As a result, ophthalmology Deans didn't always know optometry's actual interest is the same as theirs, i.e., the teaching of, and training in, their profession as defined by law or that optometry staff could act to both relieve them of non-medical/surgical services but also to increase ophthalmology's desired surgical/medical caseload. In fairness, these past negative reactions may have been due to this failure to realistically inform local hospital staffs, Deans' Committees and ophthalmology departments as to what modern optometry can now do in assuming the non-medical/surgical components of complete eye/vision care and the students' desire to practice only optometry.

While there may still exist isolated opposition by some groups

within ophthalmology this does not, I feel, represent a majority view and is often based (as is part of optometry's fear of ophthalmology) on misunderstood intentions or non-professional considerations.

## Personal Comments

Let me conclude by speaking personally. In the 10 months since Mr. Richard L. Roudebush, the Administrator of Veterans Affairs, appointed me to the new VA position, Director of Optometry (created by Public Law 93-82), I have visited over 25 of our VA hospitals and have found their administration and ophthalmology staffs to have a sincere, concerned interest in expanding the comprehensiveness of their hospital's eye/vision care and the role optometry can play as fellow professional team members. Hospital Chiefs of Staff and Chiefs of Ophthalmology Services are becoming familiar with the well-established use of optometry as a primary provider of initial and non-medical/surgical, eye/vision care in the Armed Forces (550 optometry officers, 500 technicians and 180 ophthalmology officers), and they see the validity of an appropriately modified form of this system (with teaching affiliations) for their VA hospitals. These programs could, for example, correspond to protocols now working well between other overlapping medical and non-medical professions such as audiology/otolaryngology, and psychology/psychiatry.

But no man or advisory group

within the VA can hope to establish an optometry program that will work with ophthalmology as a fellow team member unless there is effective outside support and effort on the part of academic optometry and ophthalmology.

The optometry schools will, I hope, continue on their part to strengthen their clinical faculty and training programs and begin to actively meet with their local VA hospitals. They must, at the start, work with the Hospital Director, his Chief of Staff, and the Chief of Ophthalmology and his residents to properly identify those areas of eye/vision care they can provide. They must answer the question "What can optometry do for the VA" before asking "What can the VA do for our teaching programs".

My motive is to promote more comprehensive eye/vision care while yours, as educators, is to train doctors of optometry. These two goals can, should, and will dovetail perfectly but your schools must now take part of the lead by informing both themselves and the VA about each other. The interest is there on the VA's part and the ball is in your backfield; I hope you will run with it.

I don't say this lightly for I am often asked if an optometrist is an optician, or if it takes formal education to be an optometrist, or if optometry involves anything other than "refraction". Many VA program directors are surprised to learn at least two years of college

### VA-Educational Institution Affiliations

VA Educational Institutions	Schools	VA Hospitals
Medical Schools.....	92	104
Dental Schools.....	57	50
Nursing Schools.....	314	123
Schools of Pharmacy.....	45	45
University Psychology Programs at Doctorate Level.....	89	126
Schools of Graduate Social Work.....	80	137
All Other Allied Health Professions and Occupations Programs...	687	159

### VA Hospital Personnel Serving as Faculty in Medical Schools and Other Academic Institutions

Academic Title	Total	VA Physicians	VA Dentists	Other VA Categories
Total.....	4,076	3,076	247	751
Professor.....	402	363	5	34
Clinical Professor.....	92	73	9	10
Associate Professor.....	618	533	21	64
Associate Clinical Professor.....	187	147	19	21
Assistant Professor.....	1,160	957	40	163
Assistant Clinical Professor.....	412	333	40	39
Instructor.....	513	321	26	166
Clinical Instructor.....	266	197	28	41
Adjunct Titles.....	70	10	15	45
Other Titles.....	356	144	44	168

**Table III**

and four years of professional school study are required for the O.D. degree or that your schools now devote 85% of their effort towards teaching the detection (*not definitive diagnosis*) of ocular/adnexa, disease/injury or that optometrists perform eye health screening/evaluations and other supplementary physiological testing.

I fear your spokesmen may have often spent part of their time talk-

ing to other educators and not the professional administrators now making the key decisions in third party health care plans.

Visitors to my office are often surprised when I explain optometric examinations are useful even if eyeglasses were never dispensed since such examinations will detect those patients actually requiring medical/surgical or other care, so that cost effectiveness alone argues for establishing VA optometric teaching affiliations and staff positions. In addition, the VA has the legal obligation, given by Congress, to take part in the training of *all* health professionals and your schools, of course, train the next largest independent health profession after physicians, dentists and nurses.

Thus, I ask for your help and advice in the coming years. Investigate with your local VA eye clinic staff how to best set up teaching affiliations. Their funding can come from the hospital's budget, from P.L. 92-541 grants, or our Central Office Division of Academic Affairs that now supports the other training programs. I would be happy to arrange your meeting the appropriate officials in the field or here in Washington.

I encourage your school's staff to talk with the Hospital Director of your nearest VA hospital and to work with him and his staff to find practical proposals that *directly benefit the care of our patients.*



This initial action must come from you and the hospital before we in Central Office can help for we in the Department of Medicine and Surgery only act in a professional advisory and policy planning capacity for the hospitals. We cannot, and do not, direct day-to-day field operations.

You must "sell" your program to the hospital's Deans' Committee for once they support your affiliation proposal it will proceed with a minimum of trouble.

Lastly, I suggest your schools liberalize their clinic rotations for fourth year students (so they can be off campus a quarter at a time) and investigate residency programs. Many hospitals will now welcome your students and help arrange for their preceptorship, but they are often 100 miles or more from your school. So, while the VA will offer your students diverse patient populations with higher disease/injury rates and unusual interprofessional specialty settings, your schools must be flexible to our needs so that we can together demonstrate the value of team eye/vision care.

I ask for your help, advice and encouragement. Let us now join forces with our ophthalmology colleagues and other concerned practitioners to provide more complete and efficient eye/vision care. An ever greater number of our country's veterans are, and have been, waiting. Let's get on with the job.

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## Health Staff

V.A. Occupational Listing†	Approximate number on staff*
Nurse and Nurse Anesthetist	19,500
Physician	8,650
Therapist: Occupational and Physical	2,925
Social Worker	2,150
Psychologist	1,250
Dental Assistant or Technician	1,190
Pharmacist	925
Dietitian	925
Dentist	750

†Selected numbers of staff specialists from the more than 335 different V.A. Occupational listings. There are only 16 full time equivalent staff optometrists.

\*excludes intermittent employees, interns, residents or consultants

## Birmingham VA Optometry Service

Patients examined	473
Patients in need of new prescription	335 (70.6%)
Patients provided glasses	242 (51.2%)
Patients referred to other services	91 (19.2%)
Blind patients previously unidentified as blind	10 (2.1%)

These statistics were gathered after the first few months that the University of Alabama's School of Optometry began providing optometry services at the Birmingham VA Hospital in January, 1973.

Note first that high percentages of patients required significantly updated prescriptions and that the referral rate to other health services was well over five times the national rate. (Many of the detected conditions that produced referrals would have remained undetected without these optometric examinations since the veterans were initially seeking care for different conditions.)

Finally, 2.1 per cent of these veterans were found to have become legally blind but were unidentified as such and were not, therefore, receiving the rehabilitation or other benefits for which they were eligible. This percentage contrasts with other VA hospital studies which found about 1 per cent previously unidentified as blind.

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# Challenge-

Continued from page 79.

5. The number of specialty areas should be as few as possible but must provide for comprehensive coverage when summed with general practice.

This special committee has proposed three residency programs which could lead to specialty certification. In order to be implemented, these must be approved by ASCO and other appropriate optometric bodies. Each of these programs should have prescribed standards of length, content, and competency levels. They are:

1. **Pediatric Optometry**—Specialty functions include assessment of infants vision, diagnosis and treatment of unusual binocular vision and motility problems, and vision problems associated with development and learning.
2. **Rehabilitative Optometry**—This specialty would include diagnosis and treatment of vision and ocular problems that are residual to disease, trauma, and degenerative processes including unusual vision and ocular problems associated with aging.
3. **Environmental Optometry**—This specialty would not be oriented to the care of individual patients but it would include determining standards for visual performance; assessing the effect of environmental and visual performance in ocular safety and the prescription of environmental changes; assessment of the effect of visual environment on safety and the prescription of changes in environment to promote safety; and the prescription of adaptations of visual performance to specific environments. Counseling, training, and application of specific appliances would be carried out on an individual basis.

## Post Graduate and Graduate Education

ASCO is developing plans to encourage optometric graduates to enroll in post graduate courses in other disciplines which have direct relevance to the improvement of vision care. These include programs in public health administration, social services, community medicine, and health economics.

Schools of optometry are encouraged to develop sound graduate programs in physiological optics as soon as they can develop necessary resources. This is crucial to alleviate current problems resulting from a paucity of research in optometry and a shortage of optometric educators. Optometric graduates should also be encouraged to enroll in graduate programs in biological and social sciences, and engineering which have a reputation for excellence and which provide a focus on vision science.

## Continuing Education

More than any other health profession, optometry has taken steps to assure that practitioners are required continuously to upgrade their diagnostic and treatment skills. What is needed now is the delivery system to insure that organized programs of continuing education courses of high quality regularly are made available on a national basis. Optometrists are attitudinally prepared, and, in large numbers, re-

quired to pursue continuing education. Therefore a need exists to present, in discrete units, selected subject areas designed to bring new competence and diagnostic and treatment skills to optometrists now in practice.

New technology and new knowledge in visual science permit more useful services to optometric patients. In addition, all optometry schools are presently emphasizing the role of the practicing optometrist as a primary or first contact health professional who should develop and maintain competence to discover common general health problems.

Additional needs for continuing education include effective use of technicians and new instrumentation to improve manpower efficiency ratios, and continuing education to help optometrists understand national social developments in health care and to assume leadership roles in health education. ASCO is developing plans for working cooperatively with other entities in optometry who have special interest in continuing education, to seek financial support for developing such a national program.

## Ancillary Personnel

ASCO recognizes the need to develop two-year optometric technician training programs when this can be done under appropriate circumstances. It is felt that such programs should develop in environments where optometry students and technicians can be trained together. Our organization is collaborating with Technical Education and Research Centers, Cambridge, Massachusetts, to evaluate models of work for optometric technicians and to design the most effective education and training to prepare them to serve in these roles.

## Research

Research activities in optometry schools are far below the level needed. We recognize the critical need for significant increase in emphasis on research and accept it as a responsibility. If we are to meet this responsibility, substantial new financial resources must be added to optometry schools.

## Action Needed Now

The last part of this paper is essentially a report of those ASCO activities which are directly related to helping prepare the profession to fulfill the opportunities and meet the obligations of a future that has not been designed. We believe they cover the range of primary missions of optometry schools and colleges in the United States. Broadly stated, these missions are to develop and disseminate knowledge of visual science and its application to the solution of human problems. Whatever form our future takes will result largely from how well we serve these missions.

The role of optometry in the future health care delivery system(s) can be predicted only if we act vigorously now. Many details of the general plan are yet to be determined—we *must influence*. If optometry's capacities are to become clear in the minds of decision makers, we *must inform*. Finally, optometry must get its educational and practicing houses in order so that its *image* will represent both a good and accurate reflection of its *being*. JGE

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**Ed Note:** This paper was adapted from Dr. Baldwin's report to the ADA's conference on the Future of Optometry in Tucson, Ariz., January, 1975.

# OSU Profile—

Continued from page 73

the responsibility of leadership in optometric activities at virtually all levels. At least ten state optometric associations have had Ohio State graduates as presidents: from California and Arizona in the west, to New York and Pennsylvania in the east; from Michigan and Wisconsin in the north, to Florida and Alabama in the south. Dr. H. Ward Ewalt served as AOA president in 1962-1963, and Dr. Henry W. Hofstetter served in 1968-1969.

Facilities are important, but without an outstanding faculty they could not be effective. Today, the College of Optometry has a dedicated faculty of international reputation, including fourteen with the Ph.D. degree. Faculty number almost sixty in physiological optics and optometry alone, not to mention those teaching courses in other departments within other colleges of the University. Over half are part-time faculty with highly successful practices, who serve as a mainstay of the excellent clinical faculty.

## Distinctions and Innovations

Although Ohio State is widely known for its outstanding academic and research programs in optometry and physiological optics, very few optometrists other than Ohioans and Ohio State alumni are aware that it also has one of the outstanding optometric clinical programs in the country. Columbus is a population center with over 1 million, and optometry students receive a wide variety of clinical experiences on a large number of patients. Data of the AOA Council on Education indicated, for example, that OSU students each saw

the largest number of patients at any school in 1973-1974.

With the expansion of clinical facilities, a major step forward will take place in contact lens instruction and research, where Ohio State is already a leader. The old out-patient clinic, which will become the East Wing of the Optometry Building, will largely be devoted to various clinical specialties in addition to contact lenses, including vision training and orthoptics, low vision, aniseikonia, and evaluation of ocular pathology.

Classroom and clinical instruction is supplemented with space-age systems. Ohio State has been a pioneer in developing computer-assisted instruction in optometry. The College of Optometry Instructional Media Center is widely acknowledged to be one of the most effective in optometric education. It produces teaching materials utilizing television, movies, slides, graphics, and audio tapes, as well as other specialized materials for the Self-Teaching Laboratory, which will shortly be expanded. Major progress has been made in incorporating instructional media into both the classroom and the clinic.

In 1975, the OSU College of Optometry looks back on sixty-one years of optometric progress, eager for continued growth and improvement, and still dedicated to the principle set forth in 1914 by Dr. Sheard and his associates: leadership in optometric education and research implies initiative in the pursuit of excellence. Within that tradition, the OSU College of Optometry—faculty, students, graduates and administration—will continue to strive to meet the professional educational challenges of the future.

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# Detection—

Continued from page 57

titudinal and conceptual changes occur. Hopefully, expanding the focus in treatment areas and creating additional learning experiences in integrated health sciences settings would automatically result from such changes. Appropriate educational interaction between the medical profession and the other health sciences professions could produce the desired approach to effective and comprehensive delivery of health care.

As Donald G. Bates, M.D., concluded in a paper discussing medicine's role in comprehensive care:

**Considerable thought should be given to the possibility of comprehensive community services to which a person may turn for many kinds of assistance. The amelioration of biological disorders should be among them, not on top of them. Any design for comprehensiveness should carefully examine priorities, the alignment of personnel, and their respective roles.<sup>4</sup>**

In summary, optometrists and other non-M.D. primary care providers can be trained to recognize and look for common disease signs in those patients who come to them for their special services. These professionals should be equipped to recommend the entry of these patients into the health care system at an effective level which would provide early treatment and possible prevention of more serious diseases. In this way it should be possible to reduce the number of people who wait until it is too late to receive adequate medical treatment.

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