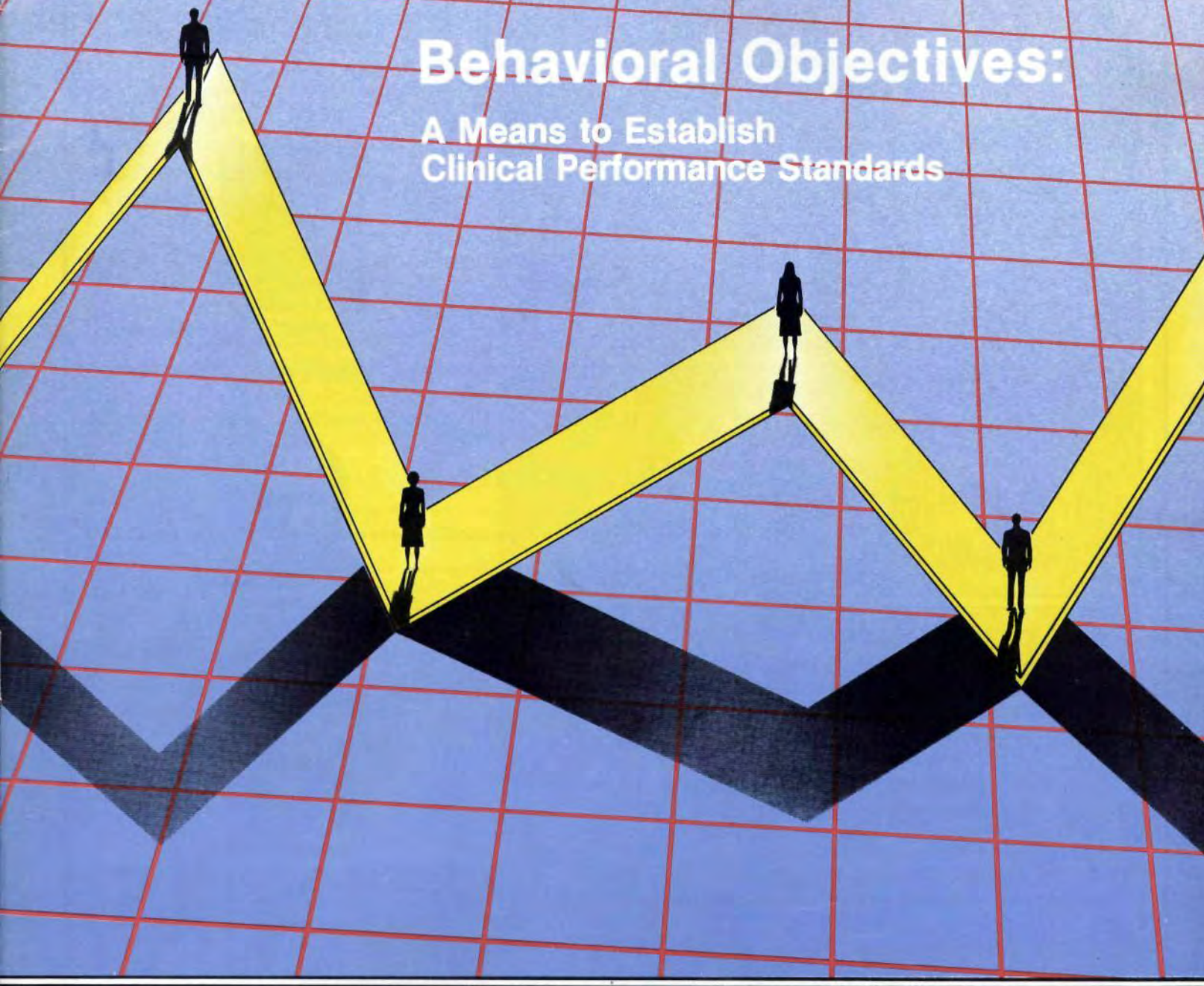
Volume 8, Number 2
Fall 1982

JOURNAL OF OPTOMETRIC EDUCATION

Behavioral Objectives:

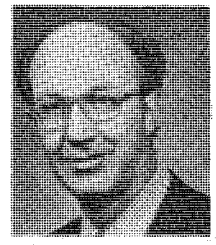
A Means to Establish Clinical Performance Standards



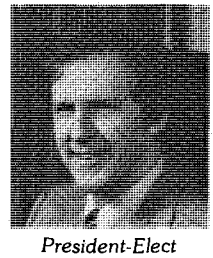
ALSO: ANNUAL SURVEY OF OPTOMETRIC EDUCATIONAL INSTITUTIONS, 1981-1982

ASSOCIATION of SCHOOLS and COLLEGES of OPTOMETRY

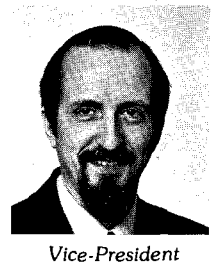
The Association of Schools and Colleges of Optometry (ASCO) represents the professional programs of optometric education in the United States and Canada. ASCO is a non-profit, tax-exempt professional educational association with national headquarters in Washington, D.C.



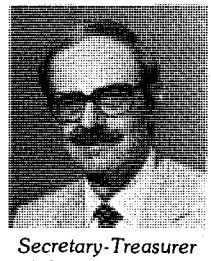
President
Willard B. Bleything, O.D., M.S.
Dean, Pacific University
College of Optometry



President-Elect
Richard L. Hopping, O.D.
President, Southern California
College of Optometry



Vice-President
Edward R. Johnston, O.D., M.P.A.
President, State University of New York
State College of Optometry



Secretary-Treasurer
Jack W. Bennett, O.D.
Dean, Ferris State College
College of Optometry

ISSN 0098-6917

Table of Contents
Fall, 1982
Volume 8, Number 2

JOURNAL OF OPTOMETRIC EDUCATION

Official Publication of the Association of Schools and Colleges of Optometry

DEPARTMENTS

Cover design and graphics by Jim Lengyel, Graphics in General
Typesetting: Bobbie Peters Graphics

The **JOURNAL OF OPTOMETRIC EDUCATION** is published by the Association of Schools and Colleges of Optometry (ASCO). **Managing Editor:** Harriet E. Long. **Art Director:** Dan Hildt, Graphics in General. Business and editorial offices are located at 600 Maryland Ave., S.W., Suite 410, Washington, D.C. 20024. **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. Advertising rates are available upon request.

EDITORIAL

"Producing Competent Clinicians: The Role of Behavioral Objectives"

Behavioral objectives are statements of educational outcome which describe skills or abilities that students are expected to acquire during their professional training. Such objectives may be written for the performance of manual skills, the exhibition of professional attitudes and for the clinical application of pertinent scientific knowledge. This editorial supports the advancement of competency based clinical training in optometry's educational system through the continued development and use of behavioral objectives in instructional design. It is sincerely hoped that these comments will serve to complement the ideas presented in Dr. Abplanalp's feature article which appears in this issue of JOE.

The concept of basing optometric educational activities upon attainment of minimum standards of behavioral competence is not new. Historically, the need for better definitions of competence as aids to curricular design was a major motivation to the development, in 1975, of ASCO's *Curriculum Model*. Since that time, the leadership of optometric education has held an open debate on the subject in symposia, in workshops and in the literature. It is probably safe to say that this discussion process has led to a gradual implementation of behavioral standards at each of our schools and colleges. Such is the case at the Pennsylvania College of Optometry, and, as stated by Dr. Abplanalp, this process also is taking place at the University of Houston.

In trying to explain why behavioral objectives have received so much recent attention, it is important to understand two advantages they lend to an educational program. First, a comprehensive set of behavioral objectives forms an exact definition of competence for the profession. Once written, such a definition can aid the profession in more accurately assessing its current status and in planning its development to better serve the public need. A detailed competency definition is also essential to provide post instructional standards of evaluation in assuring that the graduate is ready to practice.

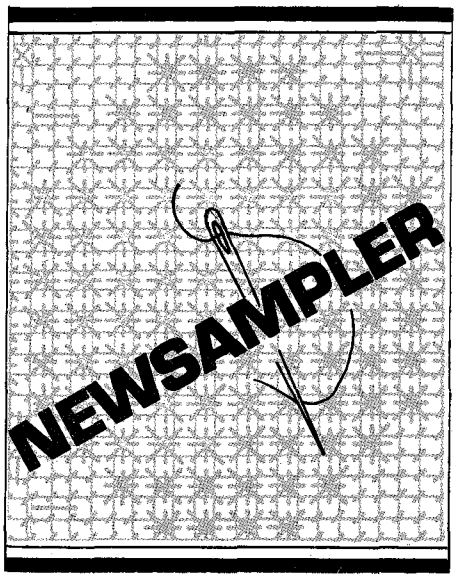
The second and perhaps more important use of behavioral objectives is that they serve as the pre-instructional goals of the educational program under consideration. Behavioral objectives are the first components of instruction that should be defined in planning a competency-based curriculum. From these objectives, the faculty then must develop the educational resources and instructional approaches necessary to produce competent graduates.

In spite of the obvious need for developing behavioral objectives, there currently seems to be some confusion and frustration among many faculty involved with their development and use. This probably stems from the fact that our schools presently are involved mainly in the *competency definition* phase of the curricular design process. This is, however, only a first step. Educators who recently have developed behavioral objectives often find it necessary to use them without sufficient pre-instructional planning. This is bound to be frustrating to faculty and students alike. To be meaningful, behavioral objectives must be translated into a program of appropriate instructional and evaluational activities which are applied, reviewed and adjusted until proven effective. Only when this is done by the entire faculty can we say that we are planning for, training and assuring competence in our graduates.

It is extremely important that the faculty recognize and accept that the planning and implementation of the instruction needed to achieve such behavioral goals will require learning and developing new educator skills. Case simulation and video tape systems are only two of the available concepts which need application. We must open our minds to the use of these ideas, and we must use our creativity to develop new techniques for better education.

In closing, it must be emphasized that behavioral objectives are foundation items. As such, they define competence within the profession and provide our educators with instructional goals to achieve. Behavioral objectives, however, are only the foundation upon which to build and rebuild the educational system. To properly construct the system we, as clinical educators must seek out the best educational resources and develop the most effective instructional methods. Let us be challenged by the dimensions of our profession to construct the best instructional system possible upon a well-laid foundation of behavioral objectives. □

Felix M. Barker, II, O.D., M.S.
Tract Coordinator
Internal Clinical Education Programs
Pennsylvania College of Optometry



SCCO Gives Bloom Sculpture to UC Berkeley

A large, contemporary sculpture created by Trustee Harry W. Bloom, O.D., of the Southern California College of Optometry (SCCO) was presented this past year to SCCO's sister institution, the School of Optometry at the University of California, Berkeley.

Entitled "Primordia," the gift, which stands well over eight feet tall, was completed by Dr. Bloom on Valentine's Day in 1981. After a viewing at the Fullerton SCCO campus, the piece was crated and shipped 800 miles north where Dr. Bloom was present for the unveiling during the Berkeley Alumni Banquet in November.

Using the quotation "the old order changeth, yielding place to new . . ." by Alfred Lord Tennyson as the inspiration for the sculpture, Dr. Bloom described "Primordia" in his dedication remarks as paying homage to the primeval elements in the cycle of visual perception.

ICO Opens Prosthetic Eye Clinic

The loss of an eye or damage to an eye often can be physically and psychologically painful. Illinois College of Optometry (ICO) clinic doctors and interns are trained to offset some of this pain working in ICO's new Prosthetic Eye Clinic.

The new clinic helps people with damaged, deformed, or discolored seeing and non-seeing eyes, people who have lost eyes through accidents, disease, or genetic abnormalities, and people who already use prosthetic devices.

A variety of techniques and devices are used in treating disorders. For example, a prosthetic, or artificial, eye made of plastic or glass, is painted to match the remaining eye and then fitted into the empty eye socket to cosmetically correct the appearance of an eye lost to trauma or disease.

The clinic also offers complete health assessment and care to individuals already using prosthetic devices. Regular checkups help ensure patient well-being and maximum cosmetic and therapeutic effects.

ICO ranks as the only optometry school to house a prosthetic specialty clinic. Clinic doctors currently see about twelve patients a month and spend approximately four to five hours fitting someone with a prosthetic device.

Cataract Study Planned by IU

A scientific study of the value of nutrition in cataract management will begin this fall at the Indiana University (IU) School of Optometry.

Forty subjects will be studied for ten months in a placebo-controlled, double-blind protocol designed to test preliminary evidence that nutritional supplements may retard or possibly reverse cataract development. Principal investigator Merrill J. Allen, O.D., Ph.D., will be assisted by faculty members at the IU School of Optometry: Dwayne D. Young, O.D.; Daryl Mann, O.D.; and Premavede Tanlamai, O.D.; and by Donald R. Davis, Ph.D., of the Clayton Foundation Biochemical Institute at the University of Texas, Austin.

The American Vision Foundation and Timothy Ellis of Bloomington, Indiana, have each granted $5,000 in support of the study. Further support is being provided by Doctors Data Inc. of West Chicago, Ill., which will conduct laboratory tests; by Strong, Cobb and Arner, Division if ICN Pharmaceuticals, which will supply nutrients and placebos; and by the Indiana Chapter of the American Academy of Optometry which is supporting the computerization of records.

Xerox Assists Visually Impaired Students at UH

Visually impaired and blind students at the University of Houston (UH) will have an easier time with their studies thanks to the Xerox Corporation's generosity.

UH is among 100 universities and colleges nationwide that have received a Kurzweil Reading Machine, valued at $30,000 each, from Xerox.

This machine greatly expands the accessibility of library resources to these students by reading aloud in a synthetic voice virtually any English document, printed or typewritten.

In addition to providing personal and direct access to printed and typewritten materials, the machine may be used as a talking calculator and full-word spoken output computer terminal.

INTERNATIONAL

Asian Pacific Congress Achieves Record Attendance

Some 600 delegates and guests attended the recent 4th Asian Pacific Optometric Congress held in Manila at the Philippine Plaza Hotel. The Congress was hosted by the Samahan ng Optometrist sa Pilipinas (Philippine Association of Optometrists) and was conducted under the auspices of the International Federation of Asian and Pacific Associations of Optometrists (IFAPAO), Dr. Clara Cinco, president.

The congress theme "Continuing Education—the Key to Optometry's Progress" included scientific and educational sessions, plenary sessions, fellowship activities, and post-congress tours. Speakers, representing a cross-section of world optometric communities, presented lectures covering vision and aging, examination and care of the pediatric patient, contact lenses, optometry in primary vision care, continuing education, and the development of optometry in Asian-Pacific countries.

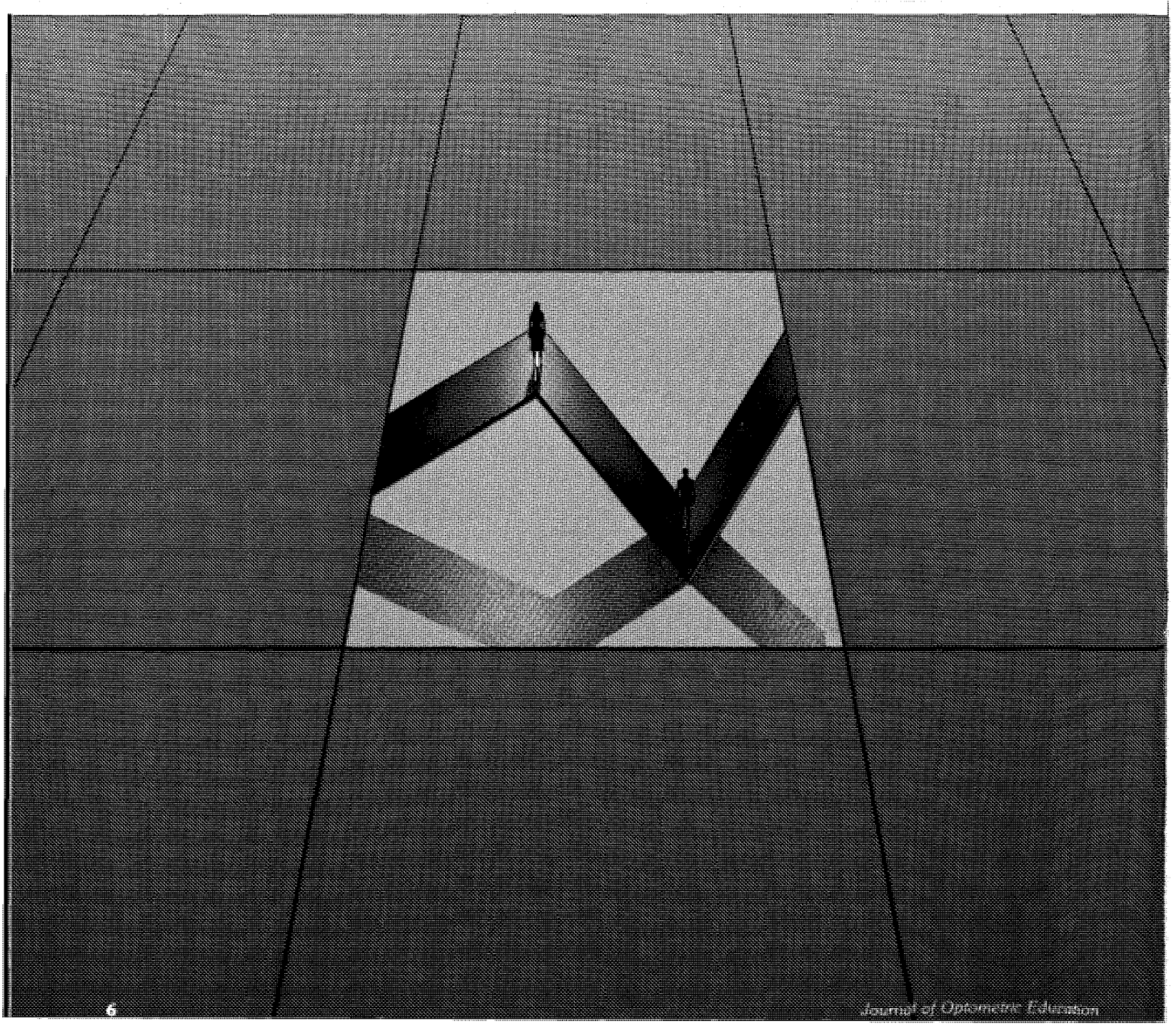
A large number of foreign delegates from eleven countries were in attendance including Australia, Great Britain, Indonesia, Japan, Korea, Malaysia, Hong Kong, Singapore, Thailand, and the United States. About 30 manufacturers and suppliers also participated at the trade exhibits. *(continued on p. 30)*

The Bausch & Lomb SOFLENS Professional Products Division supported the Pennsylvania College of Optometry Eye Institute recently with a grant of $500 for a clinical educational workshop. Presenting the check to Felix M. Barker, II, O.D., M.S. (right) are Bausch & Lomb representatives Price McIlvaine, left, and Mike Ferragamo. Dr. Barker is tract coordinator, Internal Clinical Educational Programs, at the school.

BEHAVIORAL OBJECTIVES:

A Means to Establish Profession-Wide Clinical Performance Standards

Paul Abplanalp, O.D., Ph.D.



The purpose of academic and clinical training in optometry is to develop a highly specific set of skills to, at least, a minimum acceptable level of competence. While these skills include many characteristics in common with other health care professions, they are, as a group, sufficiently well-defined and specific that they are uniquely characteristic of optometry, and in a real sense define the profession. Although optometrists and optometric educators in different parts of the country may quibble over the precise importance of a particular skill or even whether it should be included within the scope of the profession, a consensus nevertheless is emerging about what a modern optometrist should know. There is little variation among the capsule descriptions of the curricula of the various colleges of optometry as presented in the school catalogs; and the ASCO Council on Academic Affairs, in a report presented at their Toronto meeting in 1977[1] provided an explicit and detailed description of what elements should be included in an optometrist's education.

However, a curricular description, no matter how detailed it is, really expresses only what students are exposed to, not what they actually learn. Effective implementation of a curriculum also demands that performance standards be developed for students. This is a particularly compelling requirement in the education and training of health care professionals, because one of the chief obligations of health educators is to assure the public that graduates actually possess the skills to serve their public competently.

The Need for a Uniform Set of Standards

The licensing agencies of some states will grant reciprocity to a licensed optometrist with some minimal period of experience from another state without also requiring a practical examination of clinical skills. This occurs because there is a tacit recognition and acceptance within the profession of what a competent optometrist can do. Yet, no state agency automatically will grant a license to a new graduate of any optometry school; this should concern optometric educators, because it implies either that the performance standards set for optometry students are held to be inadequate or the schools' assessment of that performance is suspect. It would be hard to rebut this implied criticism, because there are no detailed performance standards endorsed by all optometry schools for the evaluation of clinical skills.

The profession is approaching a consensus concerning performance standards in the didactic elements of optometric training in the form of the NBEO examinations. These examinations are accepted by nearly all state licensing agencies and are being proposed as a selection criterion for advancement within some optometry schools.

At the same time, all states continue to perform practical examinations of students' clinical skills. It has been suggested that this is partly the schools' own fault, because generally accepted performance standards have not been promulgated. Not only would the development of such standards invite credence when reviewed by state examining boards, it in fact would improve the student evaluation process. Most clinical professors have little difficulty in identifying which students lie at the extreme ends of the distribution. The most difficult problems in evaluation often involve the decision about which borderline students will be passed and which should be failed. This may come about either because a student possesses uniformly mediocre skills no matter what criteria are applied or because different faculty members have conflicting opinions about a student's skills, with some evaluating him as passing and others as failing. It often happens, too, that individual faculty members may place disproportionate emphasis on a very narrow range of skills while ignoring others. It therefore would seem appropriate for the optometric academic community to proceed to develop a uniform, detailed and widely accepted set of clinical performance standards, expressed as behavioral objectives, which may become a prerequisite for graduation with the O.D. degree.

Achieving an Acceptable Definition

One of the first difficulties that one encounters in such an undertaking is the identification of an acceptable working definition for a behavioral objective. Professional educators have written extensively on this topic without fully resolving it.[2] For the purpose of this paper, however, a behavioral objective will be defined as an action or demonstration that an optometry student can exhibit in a form that can be observed easily and evaluated reliably by a person competent in that function. Such actions can take many forms ranging from correctly labeling an anatomical diagram to demonstrating retinoscopy on a schematic eye within specified limits of time and accuracy. A behavioral objective identifies an action to be taken rather than a state to be achieved. Thus two different students could possibly achieve an understanding of the principles of ophthalmoscopy with virtually no overlap in their knowledge if one of them masters the optical principles of the instrument while the other learns to observe a fundus with it. If the vague term, understand, is replaced with a specific set of demonstrable actions such as, "select the proper lens and observation distance, focus on the optic disc, and describe the cup/disc ratio in less than 30 seconds," there is no question of *exactly* what the student should learn.

Mager[2] advocates the use of the "Hey Dad" technique to determine if a behavioral objective is stated in a workable manner. If an objective sounds silly when it is used to complete the sentence, "Hey Dad, see how well I can . . .," then it is not specific enough. It indeed does sound silly to say, "Hey Dad, see how well I can understand ophthalmoscopy," but it is abundantly reasonable to announce one's intention to use an ophthalmoscope to observe a cup/disc ratio, and this *action* can be evaluated uniformly by anyone with adequate skill.

There is a converse error associated with making a behavioral objective too specific, because this may draw the student's attention away from the generalities that the specific facts are intended to illustrate. It is also important to be sure that an objective incorporates the true goals of one's teaching. For example, if it is desirable to have students recognize corneal disease, objectives should not be written for biomicroscopy, even though this technique is part of the diagnostic battery. Perhaps the most critical caveat, however, is to recognize that behavioral objectives should describe an *outcome* of an educational process rather than the means of achieving it. Rohwer[3] argues that some particular teaching methods are actually a hindrance to students. It is prudent, therefore, to settle for the specification of an end point and depend upon the instructor's expertise to select the method of achieving it.

Paul Abplanalp, O.D., Ph.D., is associate professor of optometry at the University of Houston, College of Optometry, Houston, Texas.

Compiling a Catalog of Objectives

The task of compiling a catalog of behavioral objectives adequate to encompass the clinical components of the optometry curriculum would be an overwhelming one, but it would provide numerous advantages:

1. If the licensing agencies of the various states could be persuaded that the (proposed) objectives were sufficiently rigorous, they could be substituted for the multiple and widely varying state examinations. This would be much more efficient and less expensive for all parties concerned and would help to assure a uniform quality of optometric practice across the country. It also would place the burden for preparing students adequately for licensure exactly where it belongs—on the educational institutions.

2. The identification of specific behavioral objectives by which a minimum acceptable level of competence demanded of a practicing optometrist can be specified will provide optometric educators with an important advantage. Armed with such objectives, the content of the curriculum can be evaluated and exactly how much time and resources must be devoted to achieve this level can be identified. This then would permit assessment of how much of the remaining resources, time and money could be expended on improving the quality of the profession by expanding optometric education both in terms of its breadth and depth.

3. Comprehensive behavioral objectives for clinical phases of the curriculum are needed badly in order to provide the same degree of resolution for evaluative purposes that most didactic courses already enjoy. It is not uncommon for clinical course work to be evaluated on a very coarse scale such as a pass/fail system, while didactic courses more often are graded on a letter scale with several levels of achievement. As a result, the evaluation of things such as the efficacy of admissions criteria are influenced more heavily by didactic course work simply because these courses are graded more carefully than equally important clinic courses. As Cowles and Kubany[4] have noted, more complex behavioral patterns (such as clinical performance) ought to have more comprehensive evaluation, not less.

4. The evaluation of a student's performance in clinic often is performed by several different people as a result of the much smaller student/faculty ratio in the clinic. An individual student may encounter several different instructors and a given class of students is virtually certain to be evaluated by several different people. One of the reasons that students typically are graded on a pass/fail basis in clinic is the great variability in evaluative criteria employed by these different instructors. The existence of a uniform set of objectives can provide a common standard for these people to work with and increase inter-observer reliability.

5. While one would expect all students to reach the same minimal level of clinical competence by the time they graduate, they must, in the meantime, be evaluated at intermediate levels of their development. With a well defined set of goals as an end point, the increments that one would expect second and third year clinicians to attain can be identified. This would help instructors, especially inexperienced ones, to avoid the application of unrealistically harsh criteria to beginning students. It also would help to identify more exactly the point at which particular students may begin to work with less supervision and accept the responsibility for making independent clinical judgments.

6. An important feature of a detailed catalog of objectives is that it provides the students, themselves, with a constant standard by which they can gauge the adequacy of their own work on a continuous basis. This permits students to ration and distribute their time more efficiently and to recognize quickly when they need help.

Utility of Behavioral Objectives

In spite of advantages like these, there are limits to the use of behavioral objectives in describing curriculum content and assessing how well students have mastered it. The most severe limit is that objectives don't tell a professor *how* to teach, nor do they tell a student *how* to learn, although these conditions may be approximated with a properly chosen set of intermediate goals. Nevertheless, there are those who claim that behavioral objectives are of no value because they fail in uses such as these for which they were not intended in the first place. Objectives should describe end points in education; routes to these points may vary according to the abilities and styles of the people concerned.

A second limit which is not necessarily characteristic of behavioral objectives, but which it is pragmatic to observe anyhow, is the recognition that objectives can be used much more easily to identify minimal acceptable levels of performance than to distinguish excellence. A list of objectives of sufficient detail to define the many levels of excellence would be extremely voluminous, because as Rohwer[3] has observed, the divergence between good and poor students increases in proportion to the instruction time. It also would be much more difficult to generate consensus upon the multifaceted dimensions of excellence than upon the relatively simple framework of minimal acceptable competence.

Finally, it must be recognized that the first efforts at describing the optometry curriculum or the minimal acceptable standards for the profession probably would have gaps in it, but this is no reason not to start.

Even if one accepts the preceding arguments concerning the utility of behavioral objectives as performance standards for the profession of optometry, it could be anticipated that many instructors would resist applying them. Unless this can be overcome, there is little point in writing objectives in the first place. The reservations which some instructors feel about using behavioral objectives take many forms, and some individuals seem capable of generating an infinite number of them, but the vast majority fall into one or another of the major categories treated below.

Examining the Criticisms

Perhaps the most common criticism of behavioral objectives is that they measure trite behaviors while ignoring complex ones.[6] In point of fact, it *is* easier to write behavioral objectives for simplistic accomplishments, just as it is easier to write multiple-choice questions that emphasize trivial and isolated facts rather than concepts, but these shortcomings are the fault of the writer not the process. It is not unusual, for even a skilled teacher, to be unable to articulate behavioral objectives dealing with complex or conceptual material simply because they lack experience at doing so. In such cases it may be extremely helpful to read Bloom's taxonomy[5] carefully to emphasize or clarify just what the levels of complexity in the cognitive domain really are. The exposure to some explicit examples of how complicated concepts are generated from elementary facts in someone else's field is often all that is needed to replicate this action in one's own field.

In any case, Popham[6] points out that if an instructor finds himself writing trivial objectives, this permits the iden-

tification of what ought to be discarded or underemphasized; thus, the process can be beneficial even if the first results must be rejected. Popham also addresses himself to teachers in fields such as the humanities who claim (as do many clinical optometry instructors) that it is extremely difficult to identify measurable student behaviors in their subject areas. They may claim it is impossible, for example, to identify good art—but they do it all the time. What they seem reluctant to do is put their criteria on the line. Much the same objection and much the same reply can be addressed to areas of clinical instruction such as taking case histories or developing skills in patient management.

A related difficulty emerges when dealing with behaviors that not only are easy to describe, but also are easy to fake. An important topic of this type is the evaluation of students' attitudes towards their patients. One can write behavioral objectives for attitudes relatively easily, but the criticism often is raised that students can assume whatever posture they are asked without ever altering their own motivation or feelings. One can, of course, answer these criticisms by the use of unobstusive measures, but the process then becomes one for a specialist in psychological testing procedures and thus lies beyond the realm of the typical clinical instructor and frees the student to behave as he wishes in an actual work situation. Does it really matter, however, that attitudes can be faked? While a student could not fake compliance with a behavioral objective in, say, ophthalmoscopy with the ease that he could apply to one in attitude formation, the fact is that as soon as he is removed from the academic milieu he can do ophthalmoscopy as poorly as he wishes and fake the results quite handily. No more long-range control can be exerted over one than the other, but that is no reason not to exert control over situations that are within the educator's grasp. More importantly, however, emulation of an attitude, even if for no better reason than to comply with a behavioral objective, is often the first step in adopting it.

There is no question that it is a great deal of work to write behavioral objectives to any significant level of detail, and this leads to the criticism that they are more trouble than they are worth. To some extent, the validity of this criticism depends upon the importance that an instructor attaches to the process of evaluating student performance in the first place. Suppose, for example, that an instructor decides to present a course in an esoteric field and, in order to entice students to enroll in it, he announces that the only requirement to pass the course is regular class attendance. Notice that the instructor has implied the existence of *one* behavioral objective, namely, physical presence on a regular basis. This will present him with no problems when he evaluates the students; he only has to take the roll. At the same time, however, he also has implied what he expects of them—nothing! One easily can imagine the outrage that these students would display if they were given an unannounced final examination. One also can imagine how badly the students would perform on such an examination, and that is the crux of the matter. It is difficult to see how the knowledge content of a course and the manner in which it should be taught can be planned without some consideration of what the students are expected to do with this knowledge if it is indeed transmitted to them. Careful evaluation *is* hard work, and that hard work must be done sooner or later. Writing specific objectives gets it done sooner and provides the student with the knowledge of what is expected of him before he begins his investment of time and effort.

The high degree of specificity of well-written behavioral goals is viewed as a liability by some people who point out that students often learn more than is intended, and by confining evaluative efforts exclusively to the stated goals, this learning is ignored. There are at least two ways to reply to this criticism. First, if students are in fact learning more than the stated objectives on a consistent basis, then either the objectives should be rewritten to include the unexpected increment or the teaching efforts that produce it should be abbreviated and the time devoted to something else. A second reply would be to observe that it is not necessary to confine the evaluative process to pass-fail, or to stated goals. It is always well to allow some latitude for the instructor's intuitive judgment or for extra achievement by the student. In any case, initial failure to specify *all* goals in a particular learning situation is hardly a good reason to specify *none* of them.

One of the most puzzling criticisms of behavioral goals is that they are somehow degrading or dehumanizing,[6] ostensibly because they treat an aspect of human behavior in a mechanistic manner. Any evaluative procedure that compares a student's behavior with some explicit or implicit set of criteria must, indeed, be mechanistic to some extent. The only alternative, on the other hand, is to evaluate them arbitrarily, and it is hard to accept the notion that this somehow would be less dehumanizing than a mechanistic approach. The fact must not be overlooked that the use of explicitly stated behavioral objectives as criteria for evaluation has an important corollary; namely, they subject the evaluators to the same sort of scrutiny as the student. If the evaluator's stated objectives are demonstrably inappropriate, he is the one who must be prevailed upon to improve. This seems to be a very humanistic exchange indeed. In any case, the mechanistic use of behavioral objectives to evaluate performance should not imply that this is all there is to the student's behavior. They merely embrace that area that instruction is designed to influence.

The most serious objection to the use of behavioral objectives is more often tacit than explicit; namely, they are threatening. They can, at least in principle, be used to evaluate the instructor as well as the student. A more than adequate reply to this criticism has been provided by Popham[6] who states, "I am committed to the point of view that those who discourage educators from precisely explicating their instructional objectives are often permitting, if not promoting, the same kind of unclear thinking that has led, in part, to the generally abysmal quality of instruction in this country."

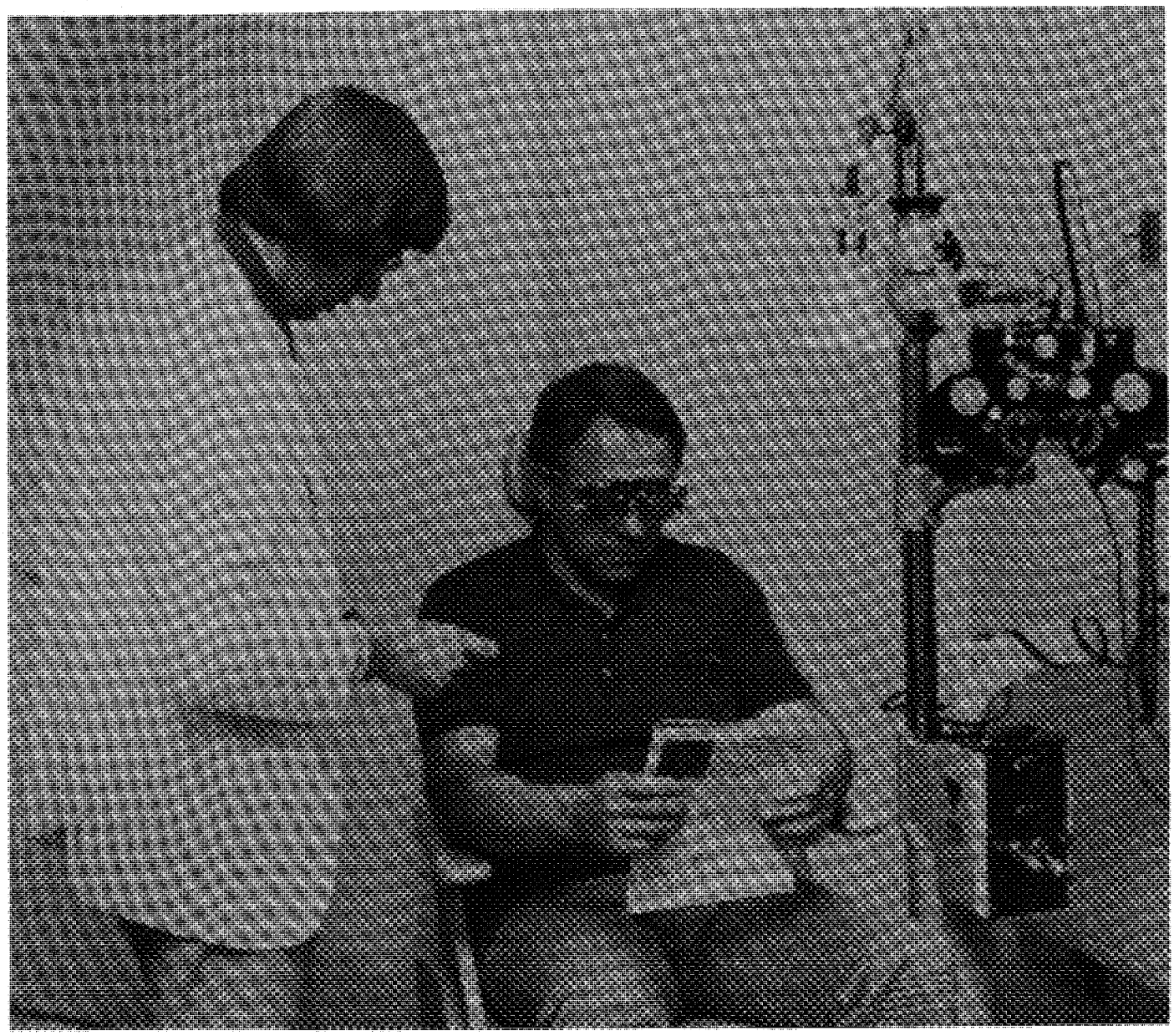
At the University of Houston, College of Optometry, the process of generating and evaluating performance standards expressed as behavioral objectives has begun, and an exchange of experiences with others interested in the approach is welcomed. □

References

1. Eskridge JB. Optometry curriculum model: a report of the curriculum committee of the ASCO Council on Academic Affairs, J Optom Educ 1978; 4(1): 11-22.
2. Mager RF. *Measuring Instructional Intent.* Belmont, Calif. Fearon, 1973.
3. Rohwer WD. How the smart get smarter. Quart Newsletter Lab Comp Human Cognition, 1980; 2: 35-39.
4. Cowles JT, Kubany AJ. Improving the measurement of clinical performance of medical students. J Clin Psychol 1959; 15: 139-143.
5. Bloom BS (ed). *Taxonomy of Educational Objectives Handbook I: Cognitive Domain.* New York, David McKay Co, Inc 1956.
6. Popham WJ. Probing the validity of arguments against behavioral goals. In: Anderson RC (ed). *Current Research on Instruction.* Englewood Cliffs, NJ, Prentice-Hall, 1969.

A Mini-Course on Patient Communication for Optometry Students

Edward S. Bennett, O.D.



A pilot project which teaches interpersonal skills to optometry students helps develop a self-awareness in handling patients and other practice problems.

It's difficult for a student to be concerned with patient communication after several years of learning facts and theory and their application. It is one that leaves very little time to become adept in optometrist-patient relationships and in the skills of humanization that are so important when beginning to practice. For that matter many professions rely significantly upon interaction between individuals. In the past several years some health professional schools, principally those in medicine, have developed courses to improve the interpersonal skills of students. In fact, in a recent survey 96 percent of the medical schools responding indicated they have a formal course in teaching interpersonal communication skills, 80 percent of which are less than five years old.[1] In optometry, one of the first patient communication courses was initiated a few years ago by the New England College of Optometry to improve their students' interviewing skills. A published assessment of the results of their program indicates that they were quite satisfied with its effectiveness.[2] Similar programs have been established at the Illinois College of Optometry, the University of Alabama in Birmingham, Pacific University and the University of Houston.

Being a clinical consultant at the Indiana University School of Optometry, this author has had ample opportunity to observe students and their ability to handle patients. Although this ability appears to come easier for some, notably the more extroverted clinicians, many have been awkward in their attempt to communicate effectively. Nervousness has been a significant factor, and justifiably so, since students still are learning to develop their examination skills. It is understandable for a student to be worried and even scared of the responsibility he now has adopted, although this is minimal compared to the life and death responsibility of the medical resident. The biggest fear of the optometry student is that the patient will not be able to see to his/her satisfaction through the newly-derived prescription.

Another important problem has been the emphasis by the student of performing the "perfect" exam-oriented approach as opposed to the patient-oriented approach. In other words he or she has been taught what fundus landmarks are important, what results are significant from the plus and minus to blur findings, how to properly perform the Jackson cross cylinders and all other diagnostic tests and the importance of an effective case presentation to the clinical instructor. Are explanations and demonstrations given? If so, are they simplified and easily understood by the patient? In many instances this is not the case (although, to some extent, confidence and the ability to rely on experience to support one's findings and answer patient questions comes with time).

Edward S. Bennett, O.D., is a clinical faculty member of the Indiana University School of Optometry and currently is completing a master's degree program in educational psychology with a special interest in interpersonal communication.

Finally, there have been student clinicians who were impatient or abrupt with their patients, others who complained about the necessity of performing certain test procedures to the clinic instructor in the presence of the patient, and still others who displayed such overconfidence that, like the opposite type of situation, caused strained relations with patients. It is apparent that in some instances clinicians have failed to realize that their livelihood will soon depend on income generated from the patients for whom they provide services. Formal courtesies and social graces are still obligations of adults in this society. There is a general standard of social conduct and ritual which is demanded in meeting and in dealing with persons who are not family members or intimate friends. Therefore, it is never too early to learn the importance of treating the people who are being served with the respect they deserve.

With this in mind, a four week mini-course was developed where interpersonal skills essential for modern optometric practice were taught. The purpose of this course was to help the students develop self-awareness of handling patients and the various problems they routinely may face.

COURSE ORGANIZATION

The course was split into four sections:

A. *The Importance of Communication.* The purpose of this section was to show the students why communication is vital to the profession, and back up reasoning with evidence.

B. *Proper Interviewing Techniques.* An essential part of any interpersonal communication course is the ability to elicit information from patients. So much of an optometrist's time is spent in two-party communication where interviewing skills can be very effective (i.e., case history, final consultation). Many demonstrations were given to the students of how to make these skills work for them.

C. *Patient Communication During the Examination.* The importance of demonstrating tests when possible, giving explanations and answering questions was explained.

D. *Communication to Different Types of Patients and Different Situations.* Since every individual is unique, students were made aware of the importance of realizing this and to react with sound judgment when different situations occur. An emphasis was placed on the loud/talkative, quiet, and dissatisfied/angry patients as these are the patients in which appropriate communicative techniques are vital.

COURSE CONTENT

The Importance of Communication

The emphasis in this section was on bringing to the student's attention *why* communication is important. Simply telling them to think for a minute about the infinite number of extremely important dyadic (two-party) relationships that exist—husband/wife, parent/child, doctor/patient, teacher/student, lawyer/client—was helpful.[3]

Patients have grown more sophisticated, and this point was emphasized. They want to know more and more about their problems and possible solutions. The patient can understand better than ever before; he is more educated about his health. He expects more understanding from the professional.

The results of current research on this topic were explained. Research many years ago by the Carnegie Institute of Technology included an analysis of the records of 10,000

persons. Their conclusions were, even in such fields as engineering, that about 15 percent of one's financial success is due to technical ability and about 85 percent is due to personality factors, including attitude, human relations, and the ability to communicate.[4]

Perhaps more pertinent to the profession are studies which have shown that 90 percent of patients base their opinion of the doctor not on his competence or technical skill, but on his or her manner during the exam and ability to communicate, and the general treatment of the patient.[5]

A survey by *Optometric Management* magazine gave these major reasons why patients changed doctors:[6]

1. Doctor never had time to listen.
2. Doctor thought all troubles were in patient's head.
3. Doctor was abrupt, rude and argued.
4. Doctor was more interested in the money.

To sum up the results of the survey, the most prevalent reason for switching optometrists was dissatisfaction with the attitude of the optometrist and his lack of communication—not his skill or his fees. The second most common reason was the desire for another opinion, a reason in a way tied to the first. After patients had switched doctors they believed that the new doctor was more attentive, explained things better, and understood the patients' problems and fears.

One point that seemed to strike home to the students is the fact that being a good communicator is vital today since it can give the O.D. a very important advantage over commercial establishments which are opening up at a rapid rate. These establishments may advertise optometric services and materials at a reduced rate, while possibly spending a significantly reduced amount of time with patients than other practice modalities.

Proper Interviewing Techniques

Interviewing skills were divided into four sections:

1. The Greeting
2. Listening Skills
3. Types of Questions
4. Appropriate and Inappropriate Responses

1. *The Greeting.* Since many students, because of their inexperience, are very anxious upon first meeting their patients, the importance of a pleasant welcome was explained. First impressions *are* the most lasting, and the easiest way to accomplish this is to smile at the patient, and the reward may be a much more satisfying relationship.[7]

A handshake, done properly (strong and affirmative) is a friend-maker. Levoy states: "It's an ice-breaker and says I want to know you. People like to shake hands with professional practitioners. Just as you like to shake hands with someone you respect and admire, they welcome a handshake from you, whom they respect and admire."[5]

A faculty member from another school of optometry once related that her research indicated a handshake, performed properly, was the most effective method of putting another person at ease. If performed weakly, or not at all, it tended to lead to a nervous, anxious interview. Having been a member of the Indiana University School of Optometry Admissions Committee, this author can confirm the calming influence of a handshake on nervous applicants.

Methods of learning the knack of intelligent small talk were discussed and examples of appropriate and inappropriate introductions were given. This, in addition to a smile, a handshake, and a few kind words, should melt the block and permit more free communication while building a cooperative relationship with the patient.

EXAMPLE 1
Types of Questions

Closed Questions

The patient supplies specific facts without deviation from the topic. Since the doctor structures the question, it requires less thinking for the patient to answer. For example, "Do you see better out of the right or the left eye?" gives the patient two choices. Likewise, "Is this correction better than the previous one?" merely requires a yes/no answer and does not readily allow for the expression of reactions to the correction. These also include:

- Leading questions—"you never have pain in your eyes, do you?"
- Rapid fire of a battery of questions—yes/no variety.

Open or Indirect Questions

Through the use of the indirect technique the patient is encouraged to express in his own way his ideas on a particular topic and structure the answer in his own mind as he chooses. Because more involvement is involved to express ideas concerning the position that one takes, the patient's response to a broad question tends to convey more feeling and information than do the answers to clinical questions.

Types of open questions:

a. *Paraphrasing or restatement (reflective)*—The purpose of this technique is to restate part or all of what the patient just said in order that he may absorb it, consider its impact, and reply in more detail. The most effective method of restating seems to be restating part of what the patient just said. This technique shows that the interviewer understands the interviewee's point of view. Words like feel, hope, and wish are used frequently.

b. *Probing*—These are used to stimulate discussion and to obtain further information. Such techniques motivate the interviewee to communicate more fully so that he or she enlarges, clarifies, or explains reasons underlying responses made previously. Examples include: "Tell me more." "How do you mean?" "Could you give me an example?"

c. *Confrontation*—With sincerity and tact, this technique may be used to confront the patient with the disparities between the explicit and implicit messages. "You say that you have been cleaning your soft lenses but we find the lenses to be heavily coated." "You say that the frame size is too large, but this was the same frame we agreed upon last Friday."

d. *Summarizing*—Highlighting the most significant data and letting the patient know where he stands.

2. *Listening Skills.* There are many simple listening skills which can be learned easily by students. The Carkhuff Insti-

tute lists the following factors as extremely important in the interview process:[8]

a. Eye contact
b. Facing the patient
c. Facilitative distance (not being far away from the other person)
d. Eye level
e. Leaning forward when sitting (toward patient)
f. Resisting distractions

To emphasize these concepts, the following passage from Wayne Dyer's *Pulling Your Own Strings* was pertinent:

> . . . Look directly into the eyes of the people you talk to. When you look down or to the side, you send signals that you aren't sure of yourself and put yourself in a prime position to be victimized. By looking directly at the person, even if you are nervous, you reflect confidence and stability.
>
> Your posture and body language should also communicate self-confidence and personal strength. Avoid slouching. Don't cover your face with your hands or clutch yourself nervously.[9]

The importance of listening to the patient as a means of allowing him time to think, as well as being a social courtesy was pointed out. By serving as a "sounding board" for the patient, the interviewer listens as he "tests" his thoughts by voicing them aloud. This form of interpersonal interaction often enables the patient to clarify his thinking, link up ideas, and tentatively decide what he should do and how best to do it. Listening tends to be taken so much for granted that most persons are relatively unaware of what is being done when one is listening.

3. *Types of Questions.* A strong emphasis was placed upon the type of questions to ask the patient in order to acquire the desired information during the interviewing (case history) process. The need to concentrate on open-ended questions was emphasized in order to obtain more than just a short answer response. In optometry it is crucial to elicit all the symptoms, in detail, to be able to come up with a tentative diagnosis and perform all necessary testing. The definitions of the possible types of questions are summarized from the Carkhuff Institute sponsored workshop as well as the "Fundamentals of Interviewing" by Richetto and Zima in Example 1.[3,8]

The "Restatement" technique is perhaps the most effective in that it gives the patient a chance to reflect on what was just said and perhaps give additional information. It is this author's experience that there are very few occasions when this type of question isn't effective. Examples of open-ended questions are given in Example 2.

4. *Appropriate and Inappropriate Responses.* Prior to having the students practice their interviewing skills, examples of appropriate and inappropriate responses were discussed as well as an appreciation of why one response would be appropriate and another inappropriate. Some of the examples given were:

Patient Comment: "I think it's these glasses you gave me that have resulted in all the problems I'm having at work."

Appropriate Response: "This may be true. Why don't you explain to me the problems you have been having" (empathetic, explorative).

Inappropriate Response: "They fit you perfectly, so I'm very doubtful the glasses are at fault. We verified them to equal the prescription I determined for you last month, so I would have to disagree with you" (authoritative, non-empathetic).

Patient Comment: "I don't want glasses. I came here to be fitted with contact lenses."

Appropriate Response: "I can certainly understand why you feel as you do. Many other patients feel the same way. Let me explain why you may feel very differently if I were to fit you" (empathetic).

Inappropriate Response: "You can't wear contact lenses. I can only fit you with glasses. If you want contact lenses, you'll have to go to Schlock Optical on 24th Street because I'm not going to take that risk" (non-empathetic, failure to explain problem).

While these situations were quite obvious as to whether their responses were appropriate or not, other situations,

EXAMPLE 2
Nondirect (Open) Questions

1. You say your vision has gradually decreased at a distance; would you care to elaborate on this?
2. In other words, the problem appears to be two-fold: your inability to see at a near distance and bilateral headaches located above your eyes after prolonged reading. Is there anything else you would care to say?
3. I am not sure I understand; would you restate that?
4. And then after you were hit in the eye . . .
5. How does that affect your vision?
6. Tell me more about why you think you're experiencing this blurring?
7. You were saying that the light sensitivity occurs when?
8. Now just to make sure I've explained things clearly, repeat to me what I've just instructed you to do.
9. Tell me a little (about your problem).
10. What do you think are the major causes (of your problem)?
11. Why do you think your solutions haven't worked as well as you'd like?
12. How do you mean?
13. Could you give me an example of what you mean?
14. Why do you think your eye is painful?
15. Do you have any other reasons (for feeling so dissatisfied about your new glasses)?
16. Is there anything else that may be affecting the situation?
17. Have I made myself clear?
18. Is there anything you would like to discuss further?

Restatement:

19. You feel your eyes have been aching lately and you're not sure what the cause is?
20. You feel that these new soft lenses are irritating to you upon prolonged wear?
21. You feel that a trifocal lens would better suit your individual needs?

where subtle differences in the response may make quite a difference in the patient's attitude, were discussed.

Patient Communication During the Examination

Again the emphasis was on educating the patient, demonstrating the tests, and explanations of what is being performed as well as pointing out that patients can pick up on how the clinical procedures are being performed. How a clinical procedure is performed may say as much to the patient as what test is administered. Clumsiness in handling equipment may well be correlated with an unknowledgeable doctor, although students realize much of their ability to communicate comes with time.

By being careful, concise, and confident in one's examination procedures and findings, a doctor can communicate very subtly, but potentially his or her sincerity and interest in the patient by means of the precision and enthusiasm with which he works.[5]

The fact that silence should be used delicately was emphasized as well as the impact doubts, confusion, surprise and annoyance in the examiner's voice can have. With finesse and experience, these hazards become suppressed but can creep back if not guarded against.[10]

The importance of explaining exam procedures was given and some of the examples where this can be used to the optometrist's advantage were given:

1. Let the patient know what is being performed with the ophthalmoscope. How else is he to know that the health of his eyes is being studied? He may be curious and this is a good time to tell him the ocular health is being evaluated.
2. Whenever the patient is given a choice of whether he sees better out of the first lens or the second, is he also told that both lenses may be blurred?
3. When performing the Red-Green test be sure to tell the patient not to worry about giving a "right" answer, and if there are any apparent problems in discrimination, the necessary information will be obtained from other tests.
4. Show the patient a picture of the retina, a series of retinal fundus slides, or a model of the eye to explain what is being looked at and the types of problems that can be found. The thoroughness and concern will come through loud and clear. Patients aren't accustomed to this much individualized attention and it is certainly appreciated.

The importance of summarizing the exam findings at the end of the exam was mentioned, especially for students, where calming fears and patients' anxiety is more critical. Students were told to be sure to give the good news first. For example, "I'm glad to report, Mrs. Jones, that your eyes are healthy and I see no signs of glaucoma or cataracts at this time. My findings show, however, that you're in need of . . . . Do you have any questions?" By reviewing findings in the final consultation with the patient, the doctor has relieved that person's anxiety and tension and enabled him or her to ask anything on their mind.

The need to end the exam on a positive note also was mentioned, especially to be as polite and courteous to them on their departure as was demonstrated at the initial greeting.

Communication to Different Types of Patients and Different Situations

Since every individual is unique, emphasis was placed upon the importance of realizing this and reacting with sound judgment when different situations occur. Particular attention was given to the loud/talkative, quiet, and dissatisfied/angry patients as these are the patients in which appropriate communicative techniques are vital. Some of the important points to keep in mind when handling the *quiet* patient are summarized in Example 3. The most important factor is to use open-ended questions as frequently as possible to elicit information from these patients.

EXAMPLE 3
The Quiet Patient

1. Ask them other than yes or no questions, encourage them to elaborate, be sure they have no problems they haven't mentioned by asking them about different symptoms specifically instead of "Are you having any problems?" generalities. At the end of the exam encourage any final comments from them as they may feel more relaxed and now tell that reading does, often give them headaches.
2. Ask questions and let them talk about themselves, their schooling, their hobbies, family, how many children do they have? Eye problems? Almost everyone has something they enjoy talking about. After the ice is broken the exam is easier.
3. Speak very softly and force them to listen carefully to you. Show concern. Answer slowly and keep asking the same questions using different words hoping to get through to them.
4. Try to joke with them, if appropriate, while being extremely courteous in order to put them at ease.
5. You may have to resort to simply telling the patient the questions you are asking him are for his own benefit, and it's important for him to answer them as thoroughly as possible.
6. Try to make them as much at ease in the office as possible—start off with small talk and explain the procedures as you do them. Explanations and descriptions are even more important with quiet patients.
7. You might discuss the patient's occupation prior to beginning the exam or some recent item of interest.
8. These people usually open up when they realize the surroundings are friendly and that we are all working toward a common goal.
9. In general, I don't find them to be a big problem. As long as they aren't real tense or nervous, a quiet patient often goes fine.

With the *talkative* patient, however, opposite procedures have to be used. Direct questions, eliciting short answers will be the most effective method of curtailing "gossip hour." A few students mentioned that this was an extremely difficult patient to handle as they always had been taught to interrupt was to demonstrate impoliteness. Politely interrupting or "redirecting" the conversation can be used at minimal embarrassment to the patient. Above all, this patient should not be encouraged. Sitting politely and listening to a bore, nodding one's head but gritting one's teeth in annoyance at his conversation selfishness and insensitivity, is teaching him to do just what is resented.

This author surveyed over 200 optometrists on handling the talkative (as well as other types of patients), and one optometrist had an innovative method. He charged patients $1.00 per minute for an examination, and they were aware

of this beforehand. Although this method is not particularly endorsed here, it certainly is unique and apparently effective. The key words are control, interrupt, and proceed with the exam. A summary of practical methods mentioned to the students on how to curtail the talkative patient is given in Example 4.

The *dissatisfied* patient, however, must be handled with kid gloves. Perhaps the most important factor stated was to be *calm* when handling this type of patient. Let the patient air the complaints and take them one at a time. If the doctor's calm continues with satisfactory explanations, the patient will calm down; if not, a refund is cheaper than the bad reputation that can result from friends of the angry patient. An unhappy patient will be much more vocal than a satisfied patient, so they can be damaging. There are times, however, when changes are made or they just can't be satisfied and the doctor must say, "We've done all we know how to do, but I'm sorry we still can't make you happy." Studies have shown that an average enthusiastic patient will tell 3-4 others; an angry person spreads the word to about 10-20 people on the average. Thus, it pays to quiet the unhappy ones *as soon as possible*. Again, the rule of thumb is "never raise your voice or argue." Agree in general terms and ask the patient what he/she thinks ought to be done. "What would you like us to do? Would you like us to correct the problem or would you prefer a refund?" Techniques for handling this patient are given in Example 5.

A related topic in which students desired information was how to handle those "difficult" patients. In Example 6 are nine toughest patient types which, in addition to the quiet, talkative, and young patients, make up the "Dirty Dozen" in optometry.

Another important area of discussion was how to handle children. Some of the major recommendations are given in Example 7. The most important point to keep in mind is to communicate on their level; simplify terms and be enthusiastic while demonstrating testing procedures.

With the elderly, however, an approach similar to that given in Example 6 is beneficial. An attitude of less aggression, more maturity, love and sympathy is needed. Usually older people have lost most of their childhood fear of doctors, but they've acquired layers of protective reserve against strangers. Men boast about their life's work, women about their descendants. So the students were advised to bring these subjects up as soon as it gracefully can be done. No matter how meager their accomplishments, they can be admired as long as the doctor forgets himself and becomes immersed in the patient.

Finally, to conclude this section of the mini-course, a brief discussion of several other topics where communication is important was given. However, because they were not emphasized as much as the aforementioned topics, as well as for the sake of brevity, they are simply listed below:

1. Communication of fees
2. Handling contact lens patients
3. Communication to the deaf
4. Handling referrals
5. Communication to the media
6. Legal aspects to consider
7. Proper grooming habits

Communication Guidelines

The mini-course was concluded with discussion of the following communication guidelines, many of which are important not only to the budding optometrist, but to individuals in almost any profession.

1. *Empathy.* The ability to relate to other people, to identify with and feel as they do is essential.

2. *The desire to help others.* This is a necessity for an individual who will be providing services for other people.

3. *Being a popular person.* Norman Vincent Peale says that popularity can be attained by a few simple, natural, and easily mastered techinques which are summarized below.[15]

   a. *Learn to remember names.* Inefficiency at this point may indicate that one's interest is not sufficiently outgoing. A man's name is very important to him.

   b. Acquire the quality of relaxed *easy-goingness* so that things do not ruffle you.

   c. *Be a comfortable person* so there is no strain in being with you—be an old-shoe, old hat kind of individual. Be homey. A stiff, reserved, unresponsive individual never meshes into the group. He is always just a bit out of it. People never quite know how to take him or how he will react. You just aren't easy-like with him.

   d. *Don't be egotistical.* Guard against giving the impression that you know-it-all (Levoy calls this the "Ivory

EXAMPLE 4
The Loud or Talkative Patient

1. Try to keep things moving. Take control firmly by moving quickly to the next test. Change the topic at first pause.

2. Tell the patient that you will be happy to continue the discussion after the exam. Get out the ophthalmoscope or put the phoropter in front of them. At the close of the exam turn the patient over to the technician.

3. Since we all enjoy talking, this can be a difficult patient to handle. It still would be preferable, however, to smile and turn the conversation back to the eyes, i.e., "Ah, yes, that's nice . . . now about your eyes . . . would you please . . . (do this or that)."

4. The art of directing a conversation is not easily acquired, but it can be developed. Questions should be direct and to the point, requiring only short answers, preferably yes, no answers. Is this better? Is this any worse?

5. If they don't answer what you ask, but begin a discourse on how this one looks good on the left side of the chart, etc., cut them off and repeat the question and get your yes, no answer. Once they realize that's what is needed, and that is all you will accept, they usually will begin answering the questions you asked and only that.

6. The best alternative may be to simply cut them off. This may not be courteous, but then they are actually being rude to other patients who have made appointments and are made to wait because of their talkativeness.

7. Charge by the minute.

8. Talk so quietly that they have to stop talking to hear—almost a mumble.

9. Leave the room "to see another patient."

EXAMPLE 5
Dissatisfied or Angry Patient

1. Listen
2. Be calm
3. "What can I do to make you happy?"
4. Be fair, but firm
5. Sympathize, if possible
6. Use diplomacy
7. Be agreeable whenever possible
8. *Rule of Thumb.* Never raise your voice or argue with a patient
9. Use reflection
10. Recheck findings
11. Discuss in private
12. Don't assume you're infallible

Tower Attitude" and this will be discussed in more detail later).

e. Cultivate the *quality of being interesting* so that people will always want to be with you and get something of stimulating value from their association with you.

f. *Practice liking people* until you learn to do so genuinely.

g. Never miss an opportunity to *say a word of congratulations* upon anyone's achievement, or express sympathy in sorrow or disappointment.[11]

4. *Having a "way with people."* This is the ability to learn how to communicate warmth. The doctor who makes the effort to project a positive image rarely fails to win his patients' confidence and trust.

5. *Enthusiasm.* Keeping enthusiasm up, especially for others, will eliminate another weakness that can be bothersome—the fear of people. This is a big worry to many though there may be few who will admit it. It has been demonstrated that enthusiasm makes a considerable difference in any person's work performance. Exposing one's daily occupation to apathy, as many individuals tend to do, can scarcely make a job anything but difficult and tiresome. It is hardly possible that a job will go well for the person who considers it just another dull chore that has to be done, that provides neither satisfaction nor interest. One may think a job is dull without realizing it could be the result of a dull attitude toward it. Try enthusiasm with work and evaluate the change that occurs in performance. Enthusiasm changes the quality of a job because it changes people.[12]

6. *Building up egos.* Finding something nice to say about others may seem trivial compared to the value of professional service, but it satisfies a roaring hunger. It brightens the day, makes them stand a little taller, and makes their workload lighter. Praise patients for their will power, diligence, and persistence, and they'll try even harder. (this, especially, is essential with teaching insertion and removal techniques to contact lens patients). Be sure to praise the act, not the person. It doubles the impact, reinforces the sincerity, and creates an incentive for more of the same.

7. *Reassurance.* Reassure patients frequently. This relaxes their fears and anxieties. It says, in effect, "Don't worry." It is a practice builder.

EXAMPLE 6
Difficult Patients

1. *Friends and Relatives.* They will try to avoid normal protocol and will often put you under close scrutiny. You need to be more careful and spend more time with these people.

2. *Medicaid patients.* Often these patients are apathetic and a hassle to handle for payments. Be patient.

3. *Mr. Complaint.* The biggest compliment you will get from this individual is silence. Be helpful. Try to calm them down; these people are often insecure.

4. *The uncertain patient.* If they really don't know what they want or what to do, you will have to quiz them a lot. You can present them with an "If you really had to make a choice what would you choose?" type of question. You may have to make some decisions for them.

5. *The know it all.* This patient tends to tell you all they know—including optometry. You simply need to move on to the next test as swiftly as possible and try to ignore them even though they can be quite irritating.

6. *Mr. Gomez.* With a foreign patient you will usually have the luxury of an interpreter nearby. If one is not available do the best you can through gestures, facial expressions, and so forth. Get their reaction to the Rx in a trial frame. Rely heavily on your objective findings.

7. *The hyper or nervous patient.* Listen and try to make them relax. Be calm and reassuring and substantiate your answers. Transfer of confidence is important.

8. *Very elderly patient.* This patient is usually in a poor frame of mind due to chronic health problems. Try to talk to them about something they know. Do not be condescending. Show them respect, they deserve it.

9. *Retarded patient.* Often you must handle them like a child. Rely on your objective findings.

10. *The hard of hearing patient.* Naturally you must talk louder and slower if patient is at least able to hear you. If the patient is deaf, then you must use a pad of paper and make frequent notes, and possibly lip-reading. Again, objective findings will be very important.

8. *What does the reasonable patient expect?* Patients will want their doctor to "be himself" and to explain facts simply, frankly, and honestly. The patient will reasonably expect the doctor to act with politeness, to treat him with respect and dignity, to explain exam procedures and to unhurriedly provide him with the amount of time which is necessary for the accomplishment of the task for which the patient is paying.

9. *Attitude.* Levoy states the following:

> . . . Just assume from the outset that the patient is basically receptive, cooperative, friendly and he means well, regardless of his 'mask.' You'll be correct in your assumption 85 percent of the time. But if you begin with

the assumption that the other person is going to be uncooperative and hard to get along with, you'll be correct almost 100 percent of the time. As friendship ripens, you may be far from liking the patient as you would a buddy, but it is enough to change the polarity, to set the stage for two-way communication on a more meaningful level. The patient feels this change and 'warms up.'[5]

10. *Why complaints occur.* Blum states that the major roadblocks on the way to patient enlightenment are failure to communicate at all (the roadblock par excellence), public speaking difficulties, saying too much too fast, failure to check on understanding, telling the patient only what he wants to hear, and scaring the patient. Shyness or explanation stage fright is just one of the public speaking hazards to patient education on the part of the doctor. Others include the professional mumble, the famous "ode to a far corner," or wherever the patient is not (explanations given to office equipment rather than to the patient), and the "double-talk switch" where the doctor explains how he has already told the patient about what he has not yet told the patient.[13]

11. *Informing the patient.*

a. *Difference between information and advice.* It is important to clearly differentiate between the giving of information and the giving of advice.

b. *Inform; don't impress.* In giving information the temptation to impress others with knowledge must be avoided.

c. *Patient repeat information.* In many situations it is a good idea to have the patient repeat the information he is given. This provides the opportunity to determine if he really understood, and it also helps him to remember the information longer.

12. *Avoid being too technical or oversimplifying explanations.* These are easy ways of "losing the patient."

13. *Silence.* Although there is no universal rule concerning how much is too much silence, it has been postulated to be only "worthwhile" as long as it is serving some function and is not frightening to the patient. The "silent treatment" has been described as a destructive weapon, the ultimate in contempt for another person. Not to have one's presence acknowledged is one of the most hurtful things to which a human being can be subjected.

It has been found that after a period of silence if the patient was the first to speak, the length of his responses increased. Therefore, a too hasty interruption by the optometrist may leave significant thoughts and feelings of the patient forever unshared.[14]

14. *Humor.* A sense of humor serves to protect one from the friction created by taking oneself too seriously. It certainly serves the purpose of relieving tension between the doctor and the patient. It's always a good idea to have a supply of "one-liners" which work effectively.

15. *Patient a partner in the treatment.* Most patients prefer such a partnership and it will prevent a host of later difficulties.

16. *Complacency.* A health professional must always be aware of the possibility of getting in a rut.

17. *Don't take patient comprehension for granted.* Sometimes they think they understand, and they don't. If any doubt exists, it's always a good idea to ask the question, "Have I made myself clear?"

18. *Promote vision care.* This is perhaps the most important guideline since optometrists are essentially salespeople for the necessity of proper vision care. It is a position in which to reach people, to make them aware of their need, and also conveys to them that optometrists can supply their need. Cost of materials, however, often overwhelms the apparent need, so they often resist buying what they really need for their own best interest. This is the point at which communication and persuasion are so profoundly required.

EXAMPLE 7
Handling Children

1. *Simplification of terms.* If you are going to talk to children, you must be on their level. Keep it simple—the man of science is often wordy. Encyclopedia terms lead to excessive yawning, especially if no illustration of what term or subject is given. The success in communicating to children lies in the ability with which words, tones, and gestures serve as useful adjuncts to your talk and promote the development of satisfaction and understanding in the children. Both the child and the optometrist must agree on what is meant by the words employed. Agreement on what words mean eliminates confusion and misunderstanding.

2. *Use of demonstrations.* Children love pictures, movies and things like depth perception and color tests, especially when presented as a game. Institute this into a fast-moving routine that gives you information since attention can waver quickly. Keep in mind there is much flexibility to what can be used and innovativeness will breed success. I think it is important to have a diagram of the eye for reference purposes. Much of a child's world is not centered upon theoretical concepts, but instead by visualization and participation. They learn from what they see. What is routine or commonplace to us is novel to them.

3. *Humor.* An essential part of your child handling repertoire is the use of humor. Children, for the most part, are apprehensive and a few "one-liners" or weird faces may well be the cure. Always try to have a few humorous parts to your examination of the young patient.

4. *Patient handling.* Don't be afraid to touch a child's hand or shoulder. Again, this as well as a friendly smile, would be effective tension relievers.

5. *Child participation.* Try to get children to participate in conversation. Ask them questions. This makes them more attentive to the tests.

6. *Interest in children.* Not only must you be able to talk to children at their level, but you have to be the kind of person to whom the child will respond favorably. Therefore, a sincere and genuine interest in children must be demonstrated.

7. *Keep it slow.* Be slow in your presentation. Nervousness tends to induce speed which may cause you to lose the child. Also, try to maintain good eye contact and not turn your back on the children for any considerable length of time.

8. *Refer to children by name.* Children are proud of their names, so refer to it frequently.

DISCUSSION

The students' overall response was positive toward the incorporation of interpersonal communication into their curriculum. Many students found these skills valuable in enabling them to assess and to improve their communication skills.

Practice of the learned communication skills, however, was an area which was almost totally neglected due to time limitations. In a class of 65 students, one definitely needs more than six lectures to teach and at least two to three instructors to assist in teaching these techniques. Certainly the use of videotaping and small group practice should be such that every student would be able to practice each skill and receive frequent individualized instruction. All in all, the course did appear to be successful and will be enlarged to a five or six week program for 1982. Hopefully, this will enable future students to spend more time practicing the skills.

One of the primary purposes of this paper was not only to indicate the need for teaching interpersonal skills but to show how it can be accomplished. Although this paper should be helpful for assisting the initiation of such a course, several other guidelines should be mentioned.

1. *Individualized instruction.* It would be helpful if members of the clinical faculty could assist in teaching the course. Not only would that give the course more instructors and hence more individualized instruction, but also these people are the individuals who are aware of the communication errors being made routinely and can give insight as to how they can be corrected.

2. *Practicing skills.* As mentioned earlier, the use of videotaping would be of invaluable assistance in helping students become aware of their faults and improve their skills. By observing and evaluating themselves as well as others, students can learn where mistakes are being made and how to improve their communication techniques. The New England College of Optometry used videotaping as a means of assessing how well their students were performing the case history on patients. Their results showed that this method was quite effective in showing students where their faults were.

Dividing the students into groups of four to six to practice these skills would be an effective supplement to the use of videotaping. Students could alternate playing the role of doctor and patient to better understand the complexities of each person's role. This should be done, time permitting, for simulation of many of the different types of patients a doctor encounters. For example, the "patient" could be given a copy of a script which depicts a typical "dissatisfied" patient, and the student's method of handling this person could be evaluated.

3. *The Carkhuff Institute of Technology* conducts workshops throughout the country for the purpose of improving the communication skills of health professionals. These programs have proven to be very effective educational tools. To obtain more information write:

Health Resources Administration
Washington, DC 20203

4. *Input from optometrists.* In compiling the information for this introductory course, over 200 O.D.'s were surveyed asking for their opinion on how to handle different types of patients. Their responses were a very important factor in determining guidelines as to what should and should not be done when handling these patients.

5. *Appropriate references.* A good place to start looking when developing an outline for the course would be James R. Gregg's book, "How to Communicate in Optometric Practice."[4] This publication tells about the different types of communication problems and how they can be solved and/or prevented. There are many publications by physicians on patient communication which serve as excellent supplementary references. In addition, many books and journal articles on the proper methods of conducting an interview are quite helpful. *Optometric Management* usually has at least one to two articles in each publication which pertain to this subject. Self-improvement books by such authors as Norman Vincent Peale,[11,12] and Wayne Dyer[9] are important for illustrating why effective communication is so important. Finally, there are several books on proper grooming habits and dress which would serve as helpful reminders to the students as to the importance of a good appearance.

CONCLUSION

There is not a more important time to learn interpersonal communication skills than while one is still in school. As a young practitioner, in debt, trying to establish and build a practice, one can't afford to make many mistakes and it would be much easier if communication skills are a minor worry. A program such as the one given to Indiana optometry students can have a significant effect on easing adjustment to a professional setting and the subsequent building of an adequate patient load. This same program also should be emphasized and courses developed for other professions (i.e., business, law, medicine and any other profession involving frequent interpersonal contact). The content of these courses should, in part, contain material pertinent to the profession under consideration. The majority of the course work, however, should be general in nature, emphasizing interpersonal communication skills and allowing time for practice of these skills while stressing understanding of another person's feelings, attitude and point of view. □

References

1. Kahn GS et al. The teaching of interpersonal skills in US medical schools. J Med Educ 1979; 54(1): 29-35.
2. Greenberg DA et al. Introduction to the clinical interview: a course for optometry students. J Amer Optom Assoc 1979; 50(2): 165-168.
3. Richetto GM, Zima JP. Fundamentals of interviewing. *Modcom*, 1976 (Science Research Associates), pp 1-35.
4. Gregg JR. *How to Communicate in Optometric Practice.* Philadelphia, Chilton Co 1969.
5. Levoy RP. *The Successful Professional Practice.* Englewood Cliffs, Prentice-Hall, 1970.
6. Bennett I. The patients who got away. Optometric Management 1980; 16(10): 21-27.
7. Barker A, Harrold B. That's what you say: but what does the patient hear? Optometric Management 1980; 16(9): 86-93.
8. Communication skills workshop for clinical faculty. Carkhuff Institute of Human Technology. Sponsored by Health Resources Administration. West Palm Beach, Fla, Oct 1979.
9. Dyer W. *Pulling Your Own Strings.* New York, Avon Books, 1978.
10. Collins M. *Communication in Health Care.* St Louis, CV Mosby, 1977.
11. Peale NV. *The Power of Positive Thinking.* Greenwich, Fawcett Publications Inc, 1956.
12. Peale NV. *Enthusiasm Makes the Difference.* New York, Fawcett World Library, 1967.
13. Blum PH. *The Management of the Doctor-Patient Relationship.* McGraw-Hill Book Co, 1960.
14. Richardson S et al. *Interviewing: Its Forms and Functions.* New York, Basic Books Inc, 1965.

Laser Therapy Effective in SMD Treatment

A major clinical trial supported by the National Eye Institute (NEI) has shown argon laser photocoagulation to be the first effective treatment for the neovascular (exudative) form of senile macular degeneration (SMD). Because many people with neovascular SMD remain in the treatable stage for only a few weeks after onset of symptoms, early diagnosis and treatment are essential to present visual loss. Results of the clinical trial, the Senile Macular Degeneration Study (SMDS), were reported in the *Archives of Ophthalmology*, June 1982.

Findings of the SMDS apply to the 10% of SMD patients who have the neovascular form, a leading cause of new cases of blindness among people over the age of 65. With properly timed laser therapy, however, about 14,000 people each year would be spared blindness. The need for treatment and its proper timing is determined by angiographic evaluation.

The neovascular type of SMD can result in blindness when the growth of abnormal new blood vessels under the retina irreversibly damages the macula—and with it, central vision. The laser treatment obliterates these abnormal vessels and prevents the bleeding, fluid leakage, scar tissue formation, and nerve tissue destruction that otherwise would result. Photocoagulation thereby prevents further visual deterioration, but it does not restore sight. Of course, if the leakage is within 200 μ from the center of the fovea, this treatment cannot be used.

The study did not include patients without drusen or with pigment epithelial detachments or neovascular membranes secondary to syndromes other than SMD. The argon laser was used for complete obliteration of the neovascular complex, and other lasers were not tested.

The signs of treatable SMD are described in the published report of the study results. Figure 1 is taken from the report and shows the retina of the eye eligible for photocoagulation treatment.

The objective of the Senile Macular Degeneration Study (SMDS) was to evaluate argon laser photocoagulation as a means of preventing blindness due to neovascular SMD. Until the SMDS, there was no conclusive proof that photocoagulation was an effective treatment for this disease. Some investigators had reported that photocoagulation slows the progression of SMD, but others thought the treatment might be ineffective or even make the disease worse. Clinics in twelve cities participated in the clinical trial, which was chaired by Stuart L. Fine, M.D., Director of the Retinal Vascular Center at the Wilmer Ophthalmological Institute of Johns Hopkins University. The centers are located in Baltimore, Chicago, Cleveland, Royal Oak, Michigan; Oklahoma City, Iowa City; Madison; Milwaukee; Miami; New Orleans; Portland, Oregon; and St. Louis.

Patients entering the SMDS were assigned at random to either a treatment group or a no treatment group. Early in the study, a significant difference between the two groups emerged. Sixty percent of the untreated eyes lost six or more lines of vision (on a Bailey-Lovie visual acuity chart) within 24 months, while only 25 percent of the treated eyes had this serious outcome. Observing the dramatic difference between treated and untreated eyes, the SMDS Data and Safety Monitoring Committee—the group of scientists responsible for monitoring the study results—recommended that the study be halted, that all eyes eligible for treatment be treated, and that the findings be announced immediately.

In commenting on the study findings, NEI Director Carl Kupfer, M.D., cautioned that it is not possible to draw conclusions about the value of laser treatment in any stage or type of macular disease other than neovascular SMD. But the results do suggest that about 90 percent of the cases of legal blindness caused by the neovascular form might be prevented or significantly delayed by appropriately timed argon laser treatment. The SMDS followed patients for 18 months after treatment before results were announced. Study patients continue to be followed to determine whether the benefits of photocoagulation persist over a longer period of time. □

Angiogram of a retina with neovascular senile macular degeneration shows the outline of the lesion created by abnormal new vessels leaking into the macula. (Photograph from Macular Photocoagulation Study Group: Argon laser photocoagulation for senile macular degeneration. Results of a randomized clinical trial. Archives of Ophthalmology, Vol. 100, No. 6, 1982. © American Medical Association.)

Orientation of the New Optometry Student through Clinical Case Presentation

Kenneth E. Brookman, O.D., Ph.D.

At the beginning of each academic year, the Southern California College of Optometry conducts an orientation program for the entering first-year class. The program is designed to welcome the new students to the college by introducing the administration of the college, the departmental chairmen, and student leaders; by conducting tours of the campus; and by discussion of college policies.

For the past two years, a new segment has been added to the orientation program. This segment, entitled "Your First Patient," is a presentation of an actual clinical patient seen at one of the college clinics. The case presentation serves to immediately involve the new optometry student in the practice of optometry. This type of program instills in the student a feeling of belonging to the profession as well as demonstrating the relevance of the basic and visual sciences to optometric clinical practice. This latter purpose is most important since the new student tends to feel isolated from the "real world" practice of the profession. In addition, faculty participation provides an opportunity for the class to meet many of their first-year instructors.

The idea for such a presentation came from medical student orientation programs.[1] These programs received very enthusiastic responses from students and participating faculty.

Case Selection

The clinical cases selected for the programs have been low vision cases since this area of optometric practice is usually the most unfamiliar to the new students and therefore would provide a suitable introduction to this aspect of patient care. In addition, a low vision case has the potential to bring together many disciplines of the basic and visual sciences as they relate to the clinical manifestation of ocular disease.

Since the case presentation includes the participation of patients, the personality and attitudes of the patients should be considered prior to selection. The patients should be individuals who are enthusiastic about the program and interested in contributing to the education of future optometrists. The patients must be able to talk about their visual problems freely and openly. Individuals with a congenital visual loss may be most suitable in this respect. They should have a pleasant personality and a good sense of humor. Patients who have had a recent visual loss are withdrawn, and/or are reluctant to talk about their visual problems would not be suitable for this type of case presentation. The patients selected for the programs at this college were most cooperative and very pleasant. The first patient, a 45-year-old female, had a visual loss due to histoplasmic retinal disease, and the second patient, a 33-year-old male, was partially-sighted due to congenital toxoplasmic retinal disease. Both patients had severe central visual acuity and field loss.

Program Design

The author, who was the program moderator, was responsible for coordinating the patients and faculty participants for each year of the program. When an appropriate case was selected, the patient was contacted and asked to participate. Both patients enthusiastically agreed. Transportation to and from the college was provided if necessary.

Following the patient selection, five faculty members, each of different scientific disciplines, were contacted and asked to present a brief discussion of their respective disciplines as it related to the clinical case. Each separate presentation was referred to as a "mini-lecture." The disciplines represented were anatomy, physiology, pharmacology, visual science and optics. Each faculty participant was provided with a summary of the case to be presented. The summary included such information as the patient's name, age, etiology of visual loss, visual need, best corrected distance visual acuity, visual acuity with a telescopic aid, best corrected near visual acuity, nature of visual field loss, case disposition, and any other information pertinent to the case. The new students were given this summary prior to the presentation.

The first program presented included the participation of a fourth-year student who served as the presenter of the case and conducted an interview of the patient. The second program did not include a student but rather a clinic faculty member who presented the clinical manifestation of the disease including fundus slides and visual field studies. Although much of the terminology was foreign to the new students, the visual consequences of ocular diseases were appreciated by all. The interview of the second patient was conducted by the moderator. The purpose of the interview was to create a dialogue between the patient and the audience. During this portion of the program, the new students were given an opportunity and encouraged to ask questions of the patient. Many of the questions related to the patient's ability to deal with the

Kenneth E. Brookman, O.D., Ph.D., is assistant professor and chief, Low Vision Service, at the Southern California College of Optometry in Fullerton, California.

visual loss. The students were quite enthusiastic in their questioning and the patients were candid in their answers.

The mini-lecture series followed the patient interview. The first presenter was the instructor of anatomy who discussed the anatomical correlates of the specific retinal disease and the resultant visual field loss. The anatomist was followed by the instructor of physiology who discussed the normal retinal physiology and the effect of the specific disease process upon this physiology. The next presenter was the instructor of general and ocular pharmacology who discussed the possible chemotherapy of the specific disease. The first-year visual science instructor then presented a lecture on visual acuity loss due to central retinal disease. Finally, the instructor of optics discussed the principles of optical magnification. Since each of the patients presented were prescribed telescopic aids, this lecture emphasized the optics of telescopic magnification.

The case presentation was concluded with a case wrap-up conducted by the moderator. This portion of the program included a summary of the case and disposition, and provided an opportunity for further questions of the patient and presenters. The entire program required approximately one and one half hours. Each portion of the program was allotted ten minutes which was adequate time for most of the presentation.

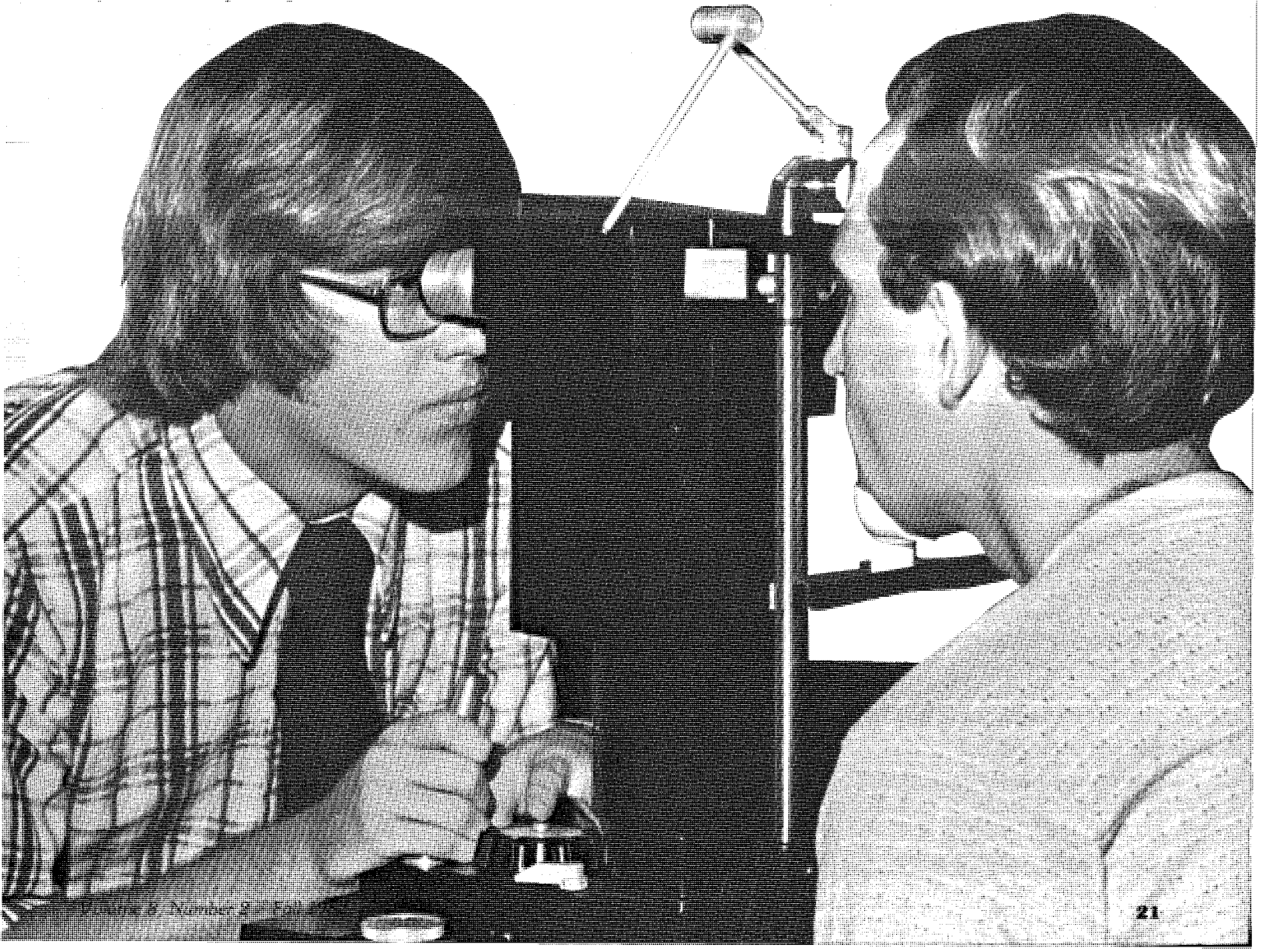
Feedback

Following the orientation program the new students were asked to complete a comment sheet regarding their feelings about the program. The comments relating to the case presentation were very favorable. The students felt that such a program helped them to become involved in the profession from the very beginning of their optometric education. Many students found the presentation a good opportunity to meet the faculty who would instruct them during their first year. The faculty participants also expressed very positive attitudes toward the program. They were quite willing to participate and felt it was a good opportunity to meet the new class prior to formal lecturing.

The success of the "Your First Patient" program for the past two years has made it a permanent segment of the college orientation program. Other optometric institutions should consider such a program as part of their orientation. Most students will remember their first patient as a pleasurable and informative experience. □

Reference

1. Schimpfhauser F, Katz LA, Carr EA. The doctor's first patient: medical student orientation through case presentation. J Med Educ July 1980; 55(7): 622-624.



COVD: *A Full Scope Optometric Care Organization*

Martin Kane, O.D.

In the history of organized optometry the College of Optometrists in Vision Development (COVD) is a relative newcomer. But in the short twelve years of its existence the college has become an important body, both in number and in its impact on the profession. Leadership in every optometric organization, and decision makers in many insurance companies and governmental agencies dealing with vision care are well aware of COVD's commitment to comprehensive functional eye care. Its counsel is frequently sought when related policy decisions need to be made.

The rank and file of optometry and optometric students may not be aware of COVD's roles and goals, whom it represents, and what it does. To illustrate these points, this article has been written.

History

The College of Optometrists in Vision Development (COVD) is an international organization with an active membership of 650 optometrists and 350 student members. The college was formed in 1970 by the merger of several optometric groups from various parts of the United States who shared a common set of basic tenets. These optometrists were dedicated practitioners who were attempting to provide full scope optometric vision care to their patients. They believed that vision was a learned process, influenced by environmental experiences and subject to change. They also held that, with appropriate guidance, a patient's visual problems could be prevented and/or habilitated and that visual information processing skills could be enhanced.

Goals

The college is formed for the primary purposes of:

1. Providing children and adults with the best possible vision through optometric vision development care;
2. Bringing together those optometrists who share a common interest and demonstrate proficiency in helping individuals develop and enhance scholastic achievement, vocational competence, social interaction, and emotional well being.
3. Promoting and fostering engagement in interdisciplinary cooperation;
4. Enabling members to maintain the highest standards of professional knowledge and competency;
5. Educating and encouraging optometrists to qualify for membership and fellowship in the college; and
6. Certifying optometrists skilled in the behavioral aspects of vision care.

Scope of Practice

The college views each member as a primary health care practitioner who is educated, trained, licensed and certified as a primary vision care provider. To become a fellow of the college, an optometrist must have demonstrated two years of clinical experience, submit in writing a "philosophy of vision" and three clinical case reports, and pass written and oral examinations administered by the college's National Examining Board.

A fellow candidate must conclusively establish knowledge and competence in: (1) evaluating the visual system and how it affects and is affected by the health and welfare of the patient; (2) providing preventive care for visually related maladaptations and disease; (3) developing programs that will enhance visual efficiency; and (4) diagnosing, treating and managing visual behavior. To maintain fellowship, each fellow must attend continuing education courses in functional vision care and adhere to the constitution and bylaws of the college.

By virtue of formal optometric training combined with a holistic model of vision and vision care, a fellow is well aware of the need for a complete diagnostic examination and evaluation; a fellow is sensitive to the need for both inter and intra-professional consultations and referrals recognizing that a team approach may be necessary to solve some patients' problems requiring referral to and consultations with physicians, clinical psychologists, special educators, occupational and movement therapists, etc. The fellow who does not provide specialty care such as formalized visual training, contact lenses, low vision aids and other optometric services refers patients for appropriate care when needs are recognized.

Fellows, in providing full scope optometric care are directly involved in an infant's development toward becoming an efficiently functioning human adult, a child's education and educational milieu, a patient's sports and recreational activities, a patient's vocational efficiency and planning, and an aging patient's maintenance of visual function. The tools utilized in achieving these patient benefits are ophthalmic lenses, guidance of growth and devel-

Martin Kane, O.D., is editor of the Journal of Optometric Vision Development *and director of the Learning and Development Center, Philadelphia, Pennsylvania.*

opment, environmental monitoring, visual hygiene counseling, and visual training programs.

Research and Awards

COVD actively encourages and supports research in vision development. Grants have been awarded to optometric students for research projects. Funding for materials and costs along with a small stipend and an award are available for a project deemed worthy of publication in the college's journal. Students may apply to the college for these grants after their proposal has been approved by a faculty member at their optometric college. Two or three grants each year are available. The final project must be accepted by the student's faculty advisor and the college's reviewing board.

An award for outstanding performance in visual training is available each year to one student at each optometric college through their department of visual training. The selection is made by the student's college.

An active program has been instituted by COVD to solicit and encourage governmental agencies and public and private sectors of business to support this research. Several members of COVD are on the board of the Foundation for Education and Research in Vision (a foundation established by the American Optometric Association).

Organizational Interface

COVD has established liaison with the American Optometric Association (AOA), the American Optometric Student Association (AOSA), the Optometric Extension Program Foundation (OEPF), the Association of Schools and Colleges of Optometry (ASCO), and many other organizations concerned with fostering maximum vision care benefits for the public. Lines of communication have been developed with the National Association for Children with Learning Disabilities, government agencies sponsoring the International Year of the Child, Year of Disabled Persons, and many other non-optometric groups. COVD is a consultant to the national office of the 4-H Club, providing guidance to their national screening program.

The college maintains an administrative agency in Washington, D.C. This office works closely with the American Optometric Association's Washington office. In addition, the Administrative Agency Committee is in constant communication with insurance companies and governmental agencies who are concerned with vision care delivery systems. The college has been instrumental in broadening third party benefits and payment for vision care. Close liaison has been established with the Bureau of Health Professions, DHHS, and the Social Security Agency. Many governmental officials have attended meetings sponsored by COVD in Washington as well as COVD meetings in other parts of the nation. The college does not work unilaterally; it always has involved other optometric organizations in these meetings. Many fellows of the college hold offices in or on the boards of directors of ASCO, the AOA, and the OEPF. College members frequently attend interassociation meetings representing several different organizations.

"The college views each member as a primary health care practitioner who is educated, trained, licensed and certified as a primary vision care provider."

Education

COVD holds an annual educational and business conference in various geographic parts of the United States. The college also has sponsored numerous seminars in different parts of the United States for optometrists and optometric students. Students always have been invited to educational seminars held for COVD members.

Publications

COVD publishes the *Journal of Optometric Vision Development* which has an international circulation of over 1,200. This quarterly journal also is subscribed to by most optometric colleges. Over three hundred and fifty students regularly receive the COVD journal and newsletter. The journal publishes current information and research development in the behavioral sciences related to vision. All presented material is refereed by editorial council members. It regularly excerpts and abstracts relevant information published in diverse fields keeping optometrists apprised of work in other disciplines. The Annual Review of the Literature, published each March, is a highlight of the *Journal of Optometric Vision Development.*

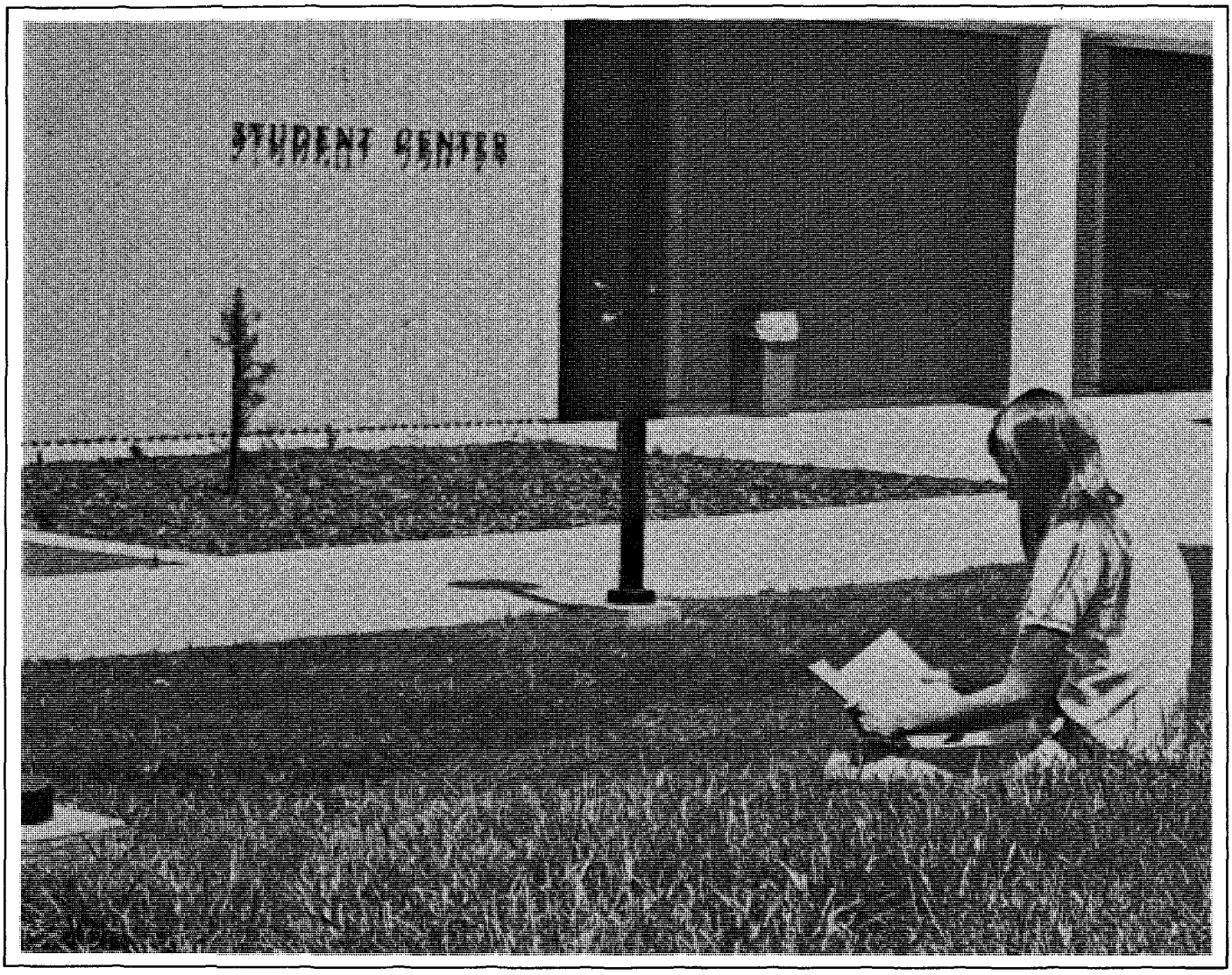
The publication office has developed over two dozen pamphlets for optometrists, other professional people, parents and adults. Topics include strabismus, amblyopia, visual training, sports vision, school vision, checklists for parents and teachers, prevention, and more. Over 10,000 brochures were distributed to consumers during the past year. A monthly newsletter is published by the college which attempts to keep fellows informed concerning its activities and accomplishments.

Summary

Fellows in the College of Optometrists in Vision Development are active members in all optometric groups and schools and colleges of optometry. Their aims closely parallel those of the Association of Schools and Colleges of Optometry and the American Optometric Association. The college encourages increased multi-association membership and conjoint participation on behalf of common goals. It recognizes that optometric groups must work closely together to make available competent services which will assure their memberships and the public maximum benefits through comprehensive optometric vision care services. □

Annual Survey of Optometric Educational Institutions 1981-1982

The following is a summary of portions of the 1981-82 Annual Survey of Optometric Educational Institutions which is conducted by the American Optometric Association Council on Optometric Education. The accompanying tables highlight information on student enrollment, academic achievement, financial aid and student expenditures for the year 1981-82. This report is published as an annual feature of JOE.



Note: This survey does not include three new schools of optometry: Northeastern State University, Tahlequah, Oklahoma; Inter American University of Puerto Rico, San Juan; and the University of Missouri-St. Louis. Data for these three schools is being collected, and it is anticipated that these schools will be included in future surveys.

Student Enrollment

Total student enrollment for the academic year 1981-82 was 4,541. This represented an increase of less than 1% (.02%) over the previous year's enrollment of 4,540. First-year students totaled 1,162. This represented slightly more than a 1% (1.02%) decline from the previous year's 1,174.

Female enrollment increased by 9.3% to 1,077 students in 1981-82 from 985 in 1980-81, and women represented 23.7% of the total enrollment. A little more than one-quarter (26.7%) or 310 students of the entering class in 1981-82 was women, compared to 25% or 297 students in 1980-81. This represented an increase of close to 4.4%.

Minority enrollment accounted for 10.66% (484 students) of the student body in 1981-82 compared to 9.52% in 1980-81. This represented an increase of 12% over the previous year and, for the second year in a row, topped the highest percentage of 8.9% (346 students) of the student body recorded in 1975-76. This year's increase in minority enrollment indicated a continuing climb in minority enrollment as the number had increased by 9.4% from 395 students in 1979-80 to 432 students in 1980-81.

Women accounted for 34.9% (169 students) of minority enrollment in 1981-82, compared to 36.3% in 1980-81. Of minorities enrolled, 12% were Black American, 20% Spanish surname, 2% native American Indian, 58% Asian American, and 8% foreign nationals.

Academic Achievement

More than two-thirds of the entering class in 1981-82, 69.7% or 806 students, had four or more years of prior college work before entering optometry school. The majority of this class, 62.7% or 725 students, had a baccalaureate or higher degree, whereas only 7% or 81 students were reported having 4+ years of prior college work. While the total number of first year students dropped by slightly more than 1%, as reported above, the number of entering students having four or more years of college also declined by 6.2% from the previous year's total of 859 (73.5% of the entering class); in addition, the number of students having a baccalaureate or higher degree decreased by 6.2% from 1980-81's total of 773 students (66% of the entering class).

Of the remaining first year students, 6.9% had 2+ years of prior college work, and 23.4% had 3+ years.

The mean grade point average for entering students in 1981-82 declined to 3.19 from 3.28 in 1980-81. Thirteen of the sixteen U.S. optometric educational institutions had mean grade point averages of 3.0 or better, and nine of these institutions had mean grade point averages of 3.25 or better. These grade point averages were based on a total of 1,244 entering students reported in *Information for Applicants to Schools and Colleges of Optometry*, Fall, 1983, published by the American Optometric Association in cooperation with the Association of Schools and Colleges of Optometry.

Erratum

Annual survey of optometric educational institutions, 1980-81. J Optom Educ. 1982 Win; 7(3): 22-27. Page 27. The number of students listed under table of "Permanent Residence" enrolled at NECO (New England College of Optometry) from CT (Connecticut) is incorrect. The correct number is 39 rather than 3.

Financial Aid

The amount of aid granted through institutions other than loans** for the academic year 1981-82 was $3,601,258. This amount increased more than 100% (143.9%) over the previous year's total of $1,476,539. The federal share of aid excluding loans amounted to 57% or $2,051,932 while the state share of aid was 32% or $1,146,912. The federal share of aid also increased more than 100% (183.2%) over 1980-81's share of $724,515, while the state share of aid increased by 80% over 1980-81's $637,126.

The total dollar amount of loans granted through institutions in 1981-82 was $11,625,494. This represented an increase of 15.2% over 1980-81's total of $10,088,580. Of the total, 59% or $6,879,858 came from federal sources creating a decrease of 12.3% over 1980-81's share of $7,844,533.

Student Expenditures

Annual student expenditures for tuition, fees, books, supplies, and other costs excluding living expenses ranged from $1,704 to $5,462 for residents and $4,501 to $9,461 for non-residents in 1981-82. If no distinction was made between residents and non-residents at a given institution, expenditures were reported in the non-resident column only. The mean average expenditure for costs other than room and board was $4,063 for residents and $6,926 for non-residents. These represented increases of 16.9% and 18.8% over the 1980-81 mean costs of $3,474 and $5,829 for residents and non-residents, respectively.

The average expenditures for room and board in 1980-81 ranged from $1,845 to $5,481. The mean average expenditure was $2,963. This represented an increase of 2.8% over the previous year's $2,882.

Taken altogether, the mean average cost of education for an optometry student in 1981-82 totaled $7,026 for residents and $9,889 for non-residents. These represented increases of 10.5% and 13.5%, respectively, over the costs of $6,356 and $8,711 in 1980-81. □

*Information for Applicants to Schools and Colleges of Optometry, Fall, 1983. St. Louis, Missouri: American Optometric Association. No explanation can be given for the discrepancy in numbers of first-year students reported in this booklet and the COE Annual Survey of Optometric Educational Institutions.

**Includes scholarships, fellowships, grants in aid, etc.

The following abbreviations have been used in the accompanying tables.

Schools

FSC	—	Ferris State College
IAU	—	Inter American University of Puerto Rico
ICO	—	Illinois College of Optometry
IU	—	Indiana University
NECO	—	New England College of Optometry
NESU	—	Northeastern State University
PU	—	Pacific University
PCO	—	Pennsylvania College of Optometry

SCCO — Southern California College of Optometry
SCO — Southern College of Optometry
SUNY — State University of New York
TOSU — The Ohio State University
UAB — University of Alabama in Birmingham
UCB — University of California, Berkeley
UMSL — University of Missouri-St. Louis
UH — University of Houston

Provinces and Territories

CZ — Canal Zone
PR — Puerto Rico
USP — U.S. Possessions
ALB — Alberta
BC — British Columbia
MAN — Manitoba
NB — New Brunswick
NF — Newfoundland
NS — Nova Scotia
ONT — Ontario
PEI — Prince Edward Island
QUE — Quebec
SAS — Saskatchewan
CAN.TER. — Canadian Territories
O.COUN. — Other Countries

Profile of 1981 Entering Class

Grade Point Averages (4.0 Scale)

	High	Low	Mean	Number of Students
FSC	N/A	N/A	3.38	32
IAU	3.92	2.08	2.82	32
ICO	N/A	N/A	3.05	154
IU	N/A	N/A	3.40	69
NECO	3.87	2.54	3.29	96
NESU	3.91	2.65	3.21	27
PCO	3.97	2.50	3.09	150
PU	3.95	2.49	3.19	85
SCCO	3.96	2.90	3.30	97
SCO	3.97	2.16	2.90	136
SUNY	3.95	2.50	3.36	64
TOSU	3.95	2.85	3.38	60
UAB	4.00	2.35	3.25	40
UCB	3.91	2.40	3.26	70
UMSL	3.90	2.00	2.80	31
UH	4.00	2.69	3.34	101
TOTAL			3.19	1,244

SOURCE: *Information for Applicants to Schools and Colleges of Optometry, Fa.., 1983,* St. Louis, Mo.: American Optometric Association.

N/A—Not Available

1981-82 Annual Survey of Optometric Educational Institutions

Number of First Year Students Enrolled with:

	2+ Yrs.	3+ Yrs.	4+ Yrs.	B.A., B.S.	M.A., M.S.	Ph.D.	TOTAL
FSC	7	11	6	7	1		32
ICO	16	48	25	62	2		153
IU	15	19	2	32	1	1	70
NECO		9		87		2	98
PCO		15		132	3		150
PU	6	31	21	26	1		85
SCCO	3	18	9	66	1		97
SCO	15	24	12	82	3		136
SUNY		3		57	4		64
TOSU	12	24	4	20			60
UAB		6	2	31		1	40
UCB		31		37	2		70
UH	6	32		59	5		102
U.S. TOTALS	80	271	81	698	23	4	1,157

1981-82 Annual Survey of Optometric Educational Institutions

Full-Time Students Enrolled in the Professional Degree Program

	First Year		Second Year		Third Year		Fourth Year		TOTALS		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
FSC	25	7	26	5	24	8	27	3	102	23	125
ICO	124	29	128	23	123	25	129	22	504	99	603
IU	44	26	44	25	48	20	45	20	181	91	272
NECO	65	33	55	30	60	20	70	29	250	112	362
PCO	112	41	110	39	119	26	108	28	449	134	583
PU	72	14	67	17	66	19	63	17	268	67	335
SCCO	67	30	70	25	67	23	68	19	272	97	369
SCO	119	18	130	19	123	23	125	7	497	67	564
SUNY	38	26	38	27	45	20	48	20	169	93	262
TOSU	46	14	45	15	45	13	45	13	181	55	236
UAB	26	14	26	16	29	8	30	7	111	45	156
UCB	46	24	43	27	49	18	52	18	190	87	277
UH	68	34	67	26	76	26	79	21	290	107	397
U.S. TOTALS	852	310	849	294	874	249	889	224	3,464	1,077	4,541

1981-82 Annual Survey of Optometric Educational Institutions

Minority Group Students Enrolled

	Black American		Spanish Surname		Native American Ind.		Asian Amer.		Foreign Nationals		TOTALS			% of Student
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total	body
FSC	3	1					1				4	1	5	4.00
ICO	1	3	6				18	8	1		26	11	37	6.14
IU	4	4	5	1		1	2	2	3		14	8	22	8.09
NECO	2	1	4	4			7	4	3	3	16	12	28	7.73
PCO	2	6	4	4			11	9	2	1	19	20	39	6.69
PU	1		3	1	1		33	11	3	3	41	15	56	16.72
SCCO	4	1	11	5	1		40	22	2		58	28	86	23.31
SCO	4	2	4		1		11	1	3	1	23	4	27	4.79
SUNY	2	1	3	5			4	5			9	11	20	7.63
TOSU		1						1				2	2	0.85
UAB	3	3		1				1			3	5	8	5.13
UCB	1	4	16	2	1	1	46	29			64	36	100	36.10
UH	2	1	16	3	2	1	8	9	10	2	38	16	54	13.60
U.S. TOTALS	29	28	72	26	6	3	181	102	27	10	315	169	484	10.66

1981-82 Annual Survey of Optometric Educational Institutions

	Financial Aid Granted Through Institutions Excluding Loans							Student Loans Granted through Institutions					
	Percentage of Students Receiving Aid				Amount			Percentage of Students Receiving Loans				Amount	
	1st Year	2nd Year	3rd Year	4th Year	Total	Federal	State	1st Year	2nd Year	3rd Year	4th Year	Total	Federal
FSC	34	13	23	20	$ 36,301	$ 13,803	$ 22,498	81	72	90	64	$ 299,468	$ 110,815
ICO	15	24	20	12	249,467	196,067	35,557	94	86	87	80	3,278,281	3,273,581
IU	1	1	1	1	9,000	1,200		——NOT AVAILABLE——					
NECO	43	23	9	14	514,018	357,614	122,732	52	28	24	21	297,163	297,163
PCO	11	19	22	26	1,344,073	996,388	63,036	98	79	70	66	2,864,707	416,460
PU	39	56	43	46	413,212	18,626	384,586	41	37	40	43	334,000	334,000
SCCO	35	41	69	74	585,706	158,203	427,503	84	80	91	74	1,989,810	929,457
SCO	0	0	0	0	——NOT APPLICABLE——			27	23	31	33	712,283	* 492,850
SUNY	20	20	20	20	100,000	40,000	45,000	60	65	70	75	870,000	60,000
TOSU	15	32	44	36	38,195	8,645		30	28	34	24	155,150	154,650
UAB	8	0	3	0	16,850	16,000		85	90	75	68	699,632	699,632
UCB	1	1	1	1	4,000		1,000	25	35	41	20	125,000	111,250
UH	18	24	25	26	290,436	245,436	45,000	——NOT AVAILABLE——					
U.S. TOTALS					$3,601,258	$2,051,982	$1,146,912					$11,625,494	$6,879,858

*Excludes $2,329,250 in Guaranteed Student Loans received by SCO students from private lenders for the 1980-81 year.

1981-82 Annual Survey of Optometric Educational Institutions

Annual Student Expenditures

	Resident Expenditures					Non-Resident Expenditures					Average Room & Board Expenditures
	1st Year	2nd Year	3rd Year	4th Year	Average	1st Year	2nd Year	3rd Year	4th Year	Average	
FSC	$5,641	$4,035	$3,791	$3,836	$4,323	$7,390	$5,816	$5,573	$5,996	$6,194	$2,067
ICO						7,545	7,000	6,770	7,202	7,129	2,780
IU	3,000	4,415	3,900	2,500	3,454	5,771	7,866	6,671	5,027	6,334	1,850
NECO						10,067	9,632	7,527	6,512	8,435	5,481
PCO						9,291	9,301	8,925	8,985	9,128	1,845
PU						8,670	7,370	7,070	6,720	7,458	2,150
SCCO						7,101	6,299	6,167	5,837	6,351	3,112
SCO	6,590	6,078	4,675	4,504	5,462	10,590	10,078	8,675	8,504	9,461	3,551
SUNY	5,855	5,355	4,855	4,355	5,105	7,855	7,355	6,855	6,355	7,105	4,580
TOSU	4,761	4,914	4,812	4,638	4,781	7,761	7,914	7,812	7,638	7,781	2,271
UAB	3,113	3,590	4,120	2,379	3,301	4,313	4,790	5,320	3,579	4,501	3,071
UCB	2,431	1,331	1,621	1,431	1,704	5,311	4,211	4,501	4,311	4,584	2,500*
UH	5,918	4,059	3,313	4,210	4,375	7,110	5,259	4,513	5,410	5,573	3,256

*Double occupancy

1981-82 Annual Survey of Optometric Educational Institutions

Permanent Residence

	FSC	ICO	IU	NECO	PCO	PU	SCCO	SCO	SUNY	TOSU	UAB	UC	UH	Total
AL							1	1			100			102
AK						3	1					1		5
AZ		1		2	2	8	15	2						30
AR							1	29					16	46
CA		30	5	14	13	38	147	9				246	1	503
CO		3	2		1	15	15	5				2		43
CT		5		47	6			3						61
DE					7		1	2						10
DC														0
FL		16	6	11	1	3	11	60	1			1	25	135
GA			2					43			11		1	57
HI		6		1	1	27	19	1				2		57
ID		3	1			16	7					1	1	29
IL		177	7	5	2	1	1	9				1	3	206
IN		9	160	1				2					1	173
IA		44	5			6	13	3						71
KS						1	1	14					25	41
KY			1				1	32			7		18	59
LA			1					26			3		33	63
ME				27	4			1				1		33
MD		12	3	4	45		1	20			7	2	4	98
MA		3	1	123	16			3				1		147
MI	125	71	6	2	2		1	7					2	216
MN		23	6	2	2	16	13	1		10			1	74
MS								26			5		7	38
MO		3	5			2	8	7	1					26
MT						10	13					1		24
NE		1	8				1	7		17			17	51
NV					1	7	12	3						23
NH		1		9		1								11
NJ		4	2	23	73	1	1	5	10			2		121
NM		1	1			4	5	1				1	12	25
NY		59	5	46	56	3		9	243			6	5	432
NC					39			54			8		7	108
ND		6				13	13	1		4				37
OH		19	4		4	1		6		205		2		241
OK		1	2				3	14					12	32
OR		1				52	6					1		60
PA		23	4	10	245			8	5				2	297
RI				17			1	2						20
SC		1	1	1				27			8			38
SD		6	1			10	10	2						29
TN		1	1	1	1	2		71						77
TX		1	1		1			4					190	197
UT		3				15	20	3					1	42
VT			1	5			2	1	1					10
VA				1	41		1	10			7			60
WA		2				53	6	3				1		65
WV		9		2	12			17						40
WI		57	27	1	1	10	8	5				3	1	113
WY						8	8							16
CZ														0
PR				3	4			1				1	1	10
USP														0
ALB						2								2
BC						1								1
MAN														0
NB														0
NF														0
NS														0
ONT						1							3	4
PEI														0
QUE														0
SAS														0
CAN.TER.						1			1					2
O.COUN.		1	3	4	3	4	2	4				1	8	30
TOTAL	125	603	272	362	583	335	369	564	262	236	156	277	397	4541

Keeping Up with People...

(continued from p. 5)

Dr. John F. Amos of the Department of Optometry at the University of Alabama in Birmingham, School of Optometry, has been promoted to the rank of professor. Dr. Amos is director of the school's residency programs and has served as chief of optometry services at the Diabetes Research and Training Center at UAB. He currently is chairman of the editorial council of the *Journal of Optometric Education.*

Dr. Amos

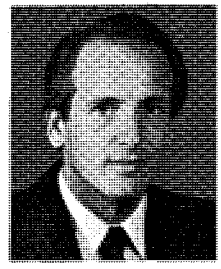
The Illinois College of Optometry Alumni Association will plant five trees in Israel in memory of **Dr. Paul F. Shulman,** who died July 13, 1982, at the age of 56. For more than 20 years, Dr. Shulman served as one of ICO's most popular and respected instructors. When he retired in 1969, he ranked as a full professor on the faculty.

Dr. Porter

Dr. Gary Porter recently accepted the position of chairman of the Division of Patient Care and executive director of clinics at the Illinois College of Optometry. He previously chaired the Division of Basic Sciences and recently was promoted from assistant professor to associate professor with contract tenure.

Dominick Maino, O.D., Illinois College of Optometry assistant professor of optometry, will be listed in the tenth anniversary edition of *Men of Achievement,* an international reference work produced at the International Biographical Centre, Cambridge, England. Dr. Maino also was selected for inclusion in *Outstanding Young Men of America,* an annual biographical compilation of outstanding achievements and abilities of men between the ages of 21 and 36.

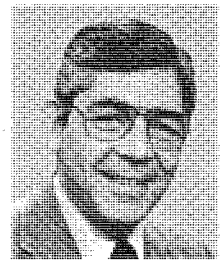
The Illinois College of Optometry recently readied itself to tackle the challenge of a declining applicant pool, a problem facing all health science professions, with **Dr. Kenneth Hyde,** who assumed the duties of assistant dean for admissions July 19. Dr. Hyde comes to



Dr. Hyde

ICO from Point Loma College in San Diego, Calif., where, as a full professor, he chaired its biology department.

The Pennsylvania Association of Colleges and Universities (PACU) has elected **Dr. Melvin D. Wolfberg,** president of the Pennsylvania College of Optometry, to serve a three-year term on its executive committee, which



Dr. Wolfberg

handles matters of policy and governance. The term began July 1.

William H. Deitz has been appointed director of development at the Southern California College of Optometry. Deitz previously served as director of alumni relations at Hartwick College in New York for ten years and was also director of development and alumni relations for Urbana College in Ohio.

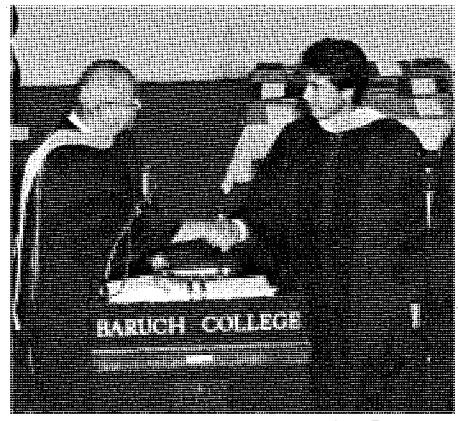
For the third year in a row, graduates of the **Southern California College of Optometry (SCCO) Optometric Technician Program** have scored above the national mean in all of the six sections of the AOA Technician Registration Examination given in April, according to **Dr. Charles B. Margach,** director of the SCCO program. The national technician registry is the successor to the AOA registry of paraoptometric personnel and its first examination was offered in 1980. Twenty SCCO graduates were among the 148 taking the exam this year.

Four new members were recently elected to the Board of Trustees of the Southern California College of Optometry (SCCO). They include: **Robert O. Dundas, O.D.,** of Laguna Beach, **Chris T. Tasulis, O.D.,** of Inglewood; **Richard F. Fixa,** an active civic leader of Fullerton; and the **Honorable James O. Perez,** a judge in the Superior Court of Orange County.

Two long-time members of the Southern College of Optometry (SCO) administration have recently retired. **Dr. Ralph Vasa** came to SCO in 1968 and became the first executive director of the Vision Educational Foundation. He later served as director of clinics until 1981 when he moved to clinical professor. **Dr. Patrick B. Lawless** became a faculty member of SCO in April, 1963, and was appointed dean of faculty in September, 1969, a position he held until 1976. He later was appointed recruitment officer.

Other SCO faculty members receiving honors include **Earl P. Schmitt, O.D.,** professor, who was appointed to a five-year term on the Board of Directors of the National Board of Examiners in Optometry; and **Wayne Yorkgitis, O.D.,** lecturer II, who was selected as an Outstanding Young Man of America.

The State University of New York (SUNY), State College of Optometry Benjamin Franklin Society, the prestigious wing of its Alumni Association, honored **Dr. Storm Elliott Field,** health/medical/science correspondent for WABC-TV in New York, and



Dr. David Kraus (left) presents the Benjamin Franklin Society Award to Dr. Storm Field, Science Editor, WABC-TV at SUNY commencement.

Melvin G. Schwartz, retiring college council chairman at the 1982 SUNY commencement ceremonies. Dr. Field spearheaded a week-long vision screening held at SUNY last fall and Mr. Schwartz, after ten years chairing the Council, has just taken office as president of the Optometric Center of New York, the college's campus-related foundation.

This year, ten members of the SUNY Optometry faculty and one member of the combined OD/MS program presented papers at the annual Association for Research in Vision and Ophthalmology (ARVO). Their topics ranged from studies of the role of Vitamin A in the regeneration of visual pigment through abnormalities in accommodation in amblyopia and their remediation by orthoptics, among others. SUNY professors participating in ARVO included: **Drs. Kenneth Ciuffreda, Dean Yager, Harry Wyatt, Jordan Pola, Jerome Sherman, Sherry Bass, Robert Sack** and **Barbara Gillam.**

Graduates honored at the 1982 SUNY Optometry commencement ceremony included: **Maris L. Feinman, Chris John Viglucci, Nieves M. Fernandez, Albert M. Morier, Glen Martin Swartwout, Lilian Weiss Weintraub, Alan J. Pasarell, Rodolfo L. Rodriguez, Joseph Martin Stamm, Linda Sue Levine Pinsky, Carol J. Dibble,** and **Gerald G. Mattison.**

Dr. Alden N. Haffner, former president of the SUNY College of Optometry and past president of the Association of Schools and Colleges of Optometry, recently was appointed vice chancellor for research, graduate studies and professional programs, Central Administration, of the State University of New York, Albany. Dr. Haffner previously had been serving as associate chancellor for health sciences. The new position combines the present program areas of graduate studies, graduate professional programs and health sciences, and research, as it relates to graduate programs, under a single officer reporting to the provost.

Dr. Alfred A. Rosenbloom, Jr., of the Illinois College of Optometry and immediate past president of the Association of Schools and Colleges of Optometry, headed a symposium on optometric education held in Manila and Cebu, Philippines, in July which was attended by the deans of eight colleges of optometry in the country, faculty members, educators, representatives for the Ministry of Education and members of the board of optometry. The symposium included lectures and workshops on curriculum development; faculty development; and clinic administration, development and evaluation of clinical performance; and institutional, curricular and course objectives. **Dr. Edwin C. Marshall,** associate professor of optometry at Indiana University, School of Optometry, also participated in the symposium.

POSITIONS AVAILABLE

A successful optometrist needs two things. The Army offers both.

Experience: your future in optometry depends on the experience you can accumulate. And you'll get more experience in your first term in the Army than some optometrists do in a lifetime. You'll see and treat all kinds of eye problems to gain the skills and proficiency that build a rich and rewarding career.

Independence: you can also avoid the heavy start-up costs of space and equipment for a civilian practice.

Instead of debts, the Army will give you officer's pay, plus special pay as a Doctor of Optometry, plus housing allowances, family health care, 30 days paid annual vacation.

And you'll wind up with the means to finance a future of your own choosing.

If this practice sounds inviting, get all the details. Write: Army Medical Opportunities, P.O. Box 7711, Burbank, CA 91510.

Army Optometry. It deserves a closer look.

ASSOCIATION OF SCHOOLS
AND COLLEGES OF OPTOMETRY
600 Maryland Ave., S.W., Suite 410
Washington, D.C. 20024