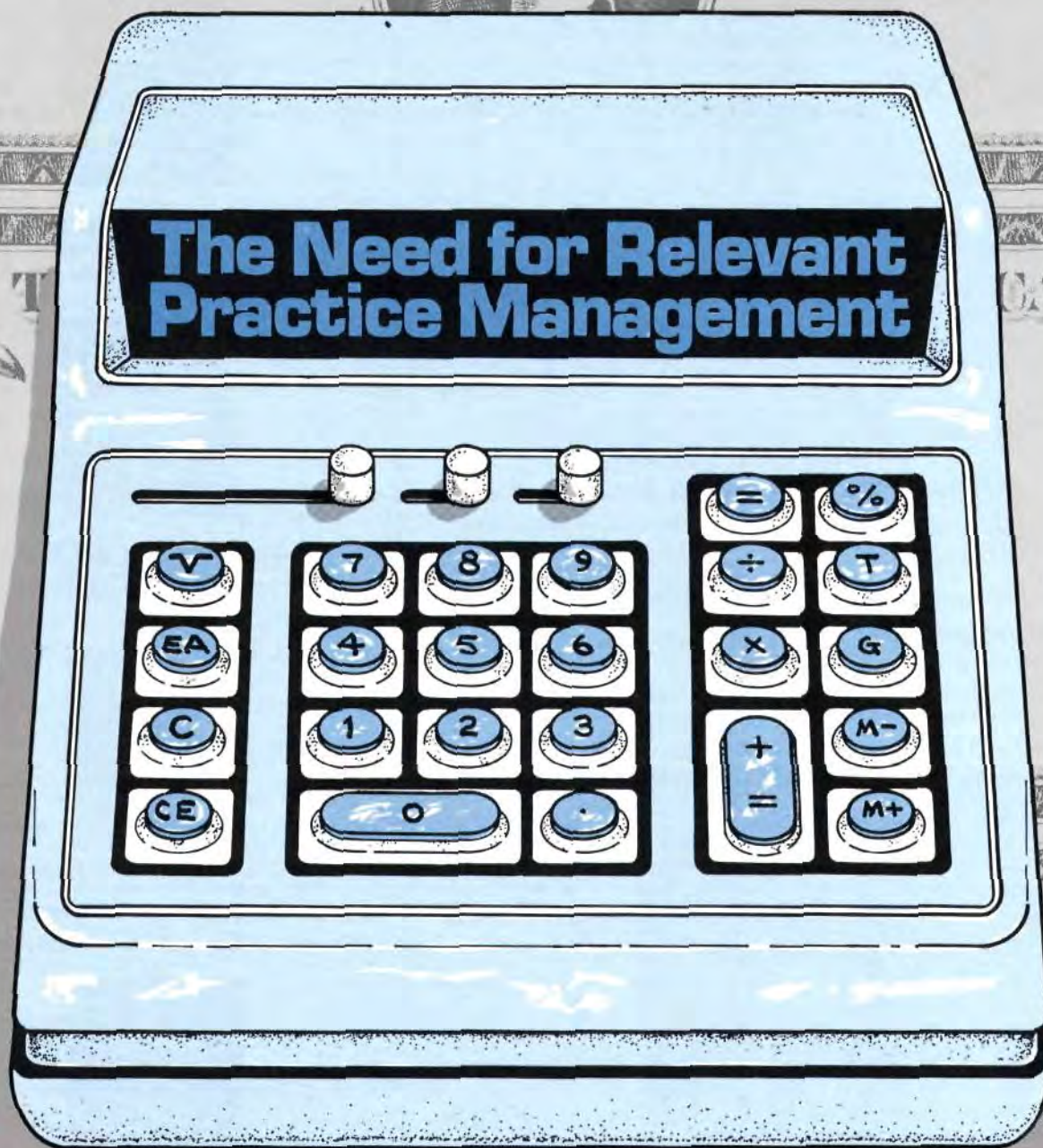


JOURNAL OF OPTOMETRIC EDUCATION

Volume 5, Number 2
Fall 1979

The Need for Relevant Practice Management



ASSOCIATION of SCHOOLS and COLLEGES of OPTOMETRY

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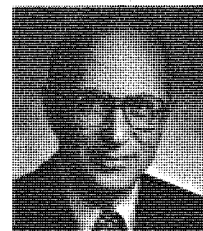
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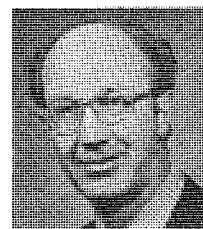
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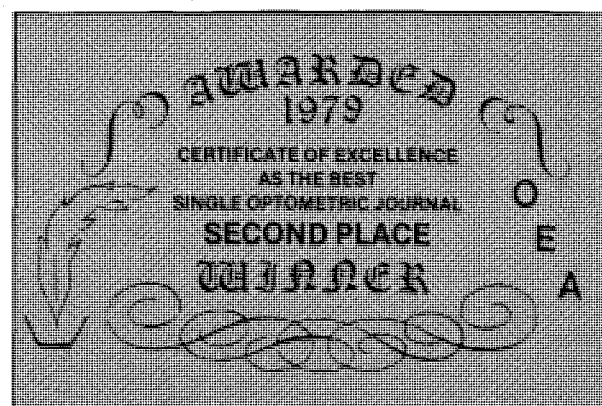
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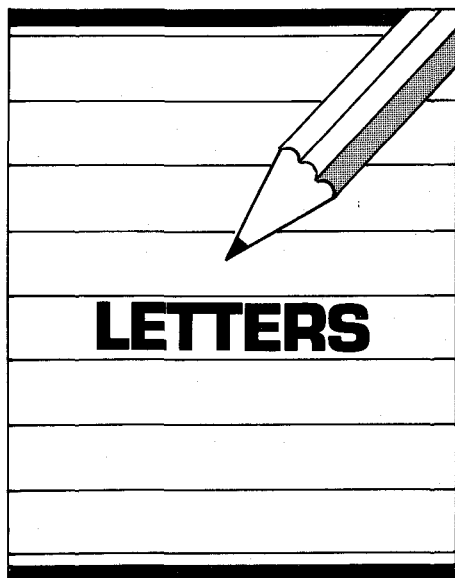
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LETTERS

Dear Dr. Haffner:

I recently received a copy of the *Journal of Optometric Education* (JOE) and was most pleased and gratified to learn of its existence. My subscription application is enclosed.

Some years ago Dr. Joseph Gelsi of Dobbs Ferry, New York, and I conducted a study to determine the most significant factors influencing the professional outlook of students attending the colleges and schools of optometry. By far the most significant factor was the inculcation of standards advanced by the institutions themselves. This finding adds another dimension to the importance of ASCO in the future of optometry.

Let us hope that the *Journal* receives wide readership, support and feedback from the clinicians throughout the country, which in turn will strengthen ASCO and broaden the scope of its goals and aspirations.

Donald Ian Gottehrer, O.D.
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Translated from the Russian by Mikhail M. Krasnov and V. S. Akopyan. Give your students practical guidelines for differential diagnosis with this new volume from a respected Russian authority. This timely reference presents methods for the differential diagnosis of pathogenetic forms of eye hypertension and the latest microsurgical techniques. Informative discussions detail treatment, anti-glaucoma procedures, and microsurgical equipment. April, 1979. 198 pp., 92 illus. plus 3 color plates. Price, \$35.00.

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ILLINOIS COLLEGE OF OPTOMETRY Clinical Faculty Positions

Applications are invited for full-time clinic faculty positions open for September 1979. Qualifications: Doctor of Optometry degree; patient care experience of at least one year; and teaching experience desirable. Responsibilities include individual instruction of interns in appropriate management of vision problems; and lecture and laboratory instruction determined from credentials and interests.

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Submit resumes to Dr. Derrald G. Taylor, Executive Director of Clinics, Illinois College of Optometry, 3241 South Michigan Avenue, Chicago, Illinois 60616. An Equal Opportunity/Affirmative Action Employer.

There are at least two important questions that one might ask concerning the National Board Examination: (1) What does the exam measure? and (2) How are the results used? The National Board Examination is a norm-referenced examination and thus measures where an individual ranks in ability with respect to some group of individuals, most likely those who have or who are taking the examination. With respect to the second question, I would suspect that the intended use of the results is to decide whether or not an individual has achieved some minimum level of competency required for the practice of optometry. If this is indeed how the examination results were intended to be used, then would it not be better to construct the test and score it according to its intended use?

A criterion-referenced examination is one in which a prior passing level of performance is established and is particularly well suited for assessing whether or not a person has achieved a minimum level of competence. Based on the belief that there is a certain body of knowledge that could be considered as indispensable for an optometrist to function with a minimum degree of competence, a criterion-referenced examination would appear more appropriate for the purpose of the National Board Examination than a norm-referenced examination. However, before a criterion-referenced examination could be constructed, the performance criteria would have to be established. This would undoubtedly be very difficult and there would be problems in standardizing the examination from year to year. There is a first step that is not so difficult to accomplish, and hence I would like to propose that the scoring of the examination be changed from norm-referenced to criterion-referenced.

Nedelsky¹ has developed a procedure for establishing absolute grading standards which is the essence of the proposal which I wish to convey, not only to the National Board of Examiners in Optometry (NBEO), but also to any instructor who uses multiple choice examinations to evaluate student performance on an absolute basis. The procedure for criterion-referenced scoring is also likely to improve the quality of construction of multiple choice tests.

Criterion-referenced scoring is achieved by establishing the minimum passing score (MPS) prior to the administration of the examination. The procedure for obtaining the MPS is to decide which distractors in a multiple choice examination ought to be identified as wrong by the student having a minimum passing knowledge of the subject matter. For each question, the number of such distractors meeting this criterion of being clearly rejectable is sub-

tracted from the total number of choices for that question. The reciprocal of the difference establishes the MPS for that question which is, in fact, the probability for a student to randomly select one of the other choices. The sum of the MPSs for all of the questions comprising the examination establishes the MPS for the entire examination. For example, a question having four choices, two of which are clearly rejectable as wrong would have an MPS of 0.5. For a 100-item test in which each question had an MPS of 0.5, a raw score of 50 would be the MPS for the entire examination.

Establishing which distractors should clearly be identified as wrong by the student who is supposed to have minimum passing knowledge could be achieved by concurrence among perhaps three to five consultants who are asked to work independently. As it would be likely for the consultants to disagree, a certain concurrence ratio (e.g., 4 out of 5, or 2 out of 3) could be predetermined before a question is to be used in the examination. Questions for which there is less than the requisite amount of concurrence for identifying the choices that are clearly rejectable should be appropriately modified or discarded.

The feasibility of scoring tests with the MPS procedure has already been shown^{1,2,3} in other areas (physics and pathology) and would undoubtedly improve the quality of the National Board Examination. I would encourage those agreeing with my suggestion or having other suggestions for improving the quality of the National Board Examination to write to the NBEO. Criterion-referenced scoring appears to me to be a reasonable first step toward the development of a criterion-referenced examination; however, criterion-referenced scoring could be applied to any multiple choice test regardless of the basis on which the test was designed. □



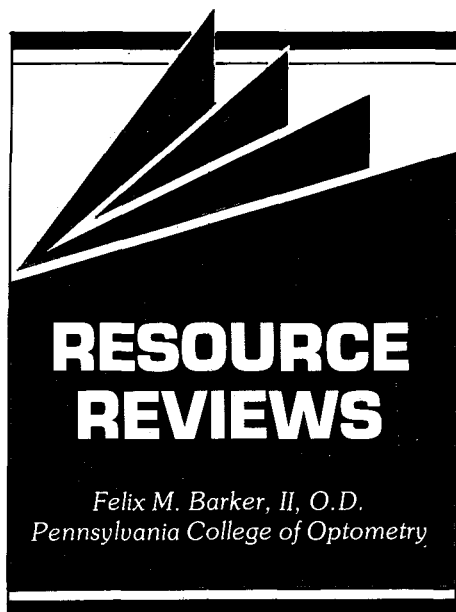
Paul L. Pease, O.D., Ph.D.

Director of Vision Sciences

The New England College of Optometry

References

1. Nedelsky L: Absolute grading standards for objective tests. *Educ Psychol Meas* 14: 3-19, 1954.
2. Taylor DD, Reid JC: Criterion-referenced evaluation of student performance. *J Med Educ* 47: 970-971, 1972.
3. Taylor DD, Reid JC, Senhauser DA, Shively JA: Use of minimum pass levels on pathology examinations. *J Med Educ* 46: 876-881, 1971.



A Clinical Guide to Soft Contact Lenses. By M.R. Spinell, O.D., F.A.A.O. Radnor, PA: Chilton, 212 pp., illustrated soft-bound with wide margins.

This informative text is a valuable resource for the busy optometrist and optometric educator who must cope with the rapid changes occurring in the soft contact lens industry.

Continuous research and development with soft lenses has resulted in a dramatic increase in the number of lens types and materials which are available. Presently there are some 15 lenses available on the market with more on the drawing board. The constant state of flux in the soft lens arena makes it difficult for the optometrist to stay abreast of the lenses available, their physical characteristics and their fitting techniques.

This problem is particularly important for the clinical educator who must deal with a broader selection of lenses to ensure a wide ranging experience for the optometry student.

Dr. Spinell's text would double well as a laboratory manual and clinical handbook. As a lab manual, it covers the general principles of corneal physiology, measuring lens parameters, evaluation of lens fit, patient training and post-fit care in a logically sequenced outline format with concise yet informative explanations. As a clinical handbook one section of the text contains valuable information concerning specific physical parameters, as well as lens selection and evaluation for most of the lenses currently available. This last feature, of course, is a strong point for buying the book now, but will become outdated in a year or two. It is hoped

that the author will continue to revise the contents of the text on a regular basis.

A Guide to Education for the Health Professions. By The Committee of Presidents of the Health Professions Educational Association, Association for Academic Health Centers. Washington, D.C.: Acropolis Books, 1979, 139 pp., \$4.95.

This valuable resource book provides the health educator with quick reference information on major health care professions. Allied health, dentistry, health services administration, medicine, nursing, optometry, osteopathic medicine, pharmacy, podiatric medicine, public health and veterinary medicine are explained through a brief series of outlines and short descriptions.

Each profession is profiled over eight to ten pages as to the numbers of practitioners and their licensure requirements. The educational institutions serving the profession are listed along with basic admission requirements, curriculum contents and accreditation procedures, as well as other interesting statistics. These outline profiles are followed by brief descriptions formulated by the leaders of each profession concerning the education of the profession, past changes in education, current trends and future challenges to that profession and its educational system.

With its concise presentation, the *Guide to Education* serves the health educator as a realistic resource in developing curricular and training programs involving interdisciplinary interaction. Not only are basic facts and figures available but a sense of how each profession views itself and its future can be obtained for a few moments' investment of time.

A Framework for Student Affairs at Schools and Colleges of Optometry. By H. Heiberger, J. Crozier, D.W. Davidson and B. Shoener. Washington, DC: Association of Schools and Colleges of Optometry, 1979, 45 pp.

Prepared by the Council on Student Affairs of the Association of Schools and Colleges of Optometry (ASCO), this manual provides a framework for services and activities in a variety of areas concerned with optometric students.

Admissions, records, financial aid and counseling are but a few of the areas that are included in this important text. Under each topical heading, the principal goal is stated, followed by an

outline of objectives, services, staffing and evaluation.

The student affairs administrators will find this brief text a valuable resource for evaluating policies and services provided locally as well as in initiating the planning process for new ones.

Microsurgery Of The Glaucomas. By Mikhail M. Krasnov (translated from the Russian by Mikhail M. Krasnov and V.S. Akopian). St. Louis: C.V. Mosby Co., 1979, 184 pages, 92 illustrations, \$35.00.

This is a most interesting book, to an American, because many of the concepts and procedures in the surgical treatment of the glaucomas are not commonly accepted in America. This is perhaps best stated by the author in the preface to the American edition where he states: "The general sum of information available in our countries concerning the existing methods of diagnosis and treatment of the disease is more or less equal. But the procedures adopted in everyday clinical practice are not the same. Each of the countries has chosen those procedures most suitable for its own specific ends. This was influenced by a number of factors, among them their respective historical backgrounds and the fundamental differences in their social systems. Some methods described and even the manner and style of their descriptions may probably seem unusual to an American ophthalmologist."

The most significant primary difference in the surgical management of the glaucomas by the author and that usually followed in America is the desire, of the author, to not have a filtration bleb. In the Americas, at least in the open angle glaucomas, there is the desire to form a filtering bleb, but under control. When reading this book it is necessary for one to have an in-depth understanding of the descriptions and surgery, as used in the Americas, if one is to avoid significant confusion. It is important for the optometrist to recognize these fundamental differences in descriptions and surgery of the glaucomas, if serious errors in the interpretations of articles, correspondence, and the surgical management of the patient with glaucoma is to be avoided when relating the American experience with those of the Russians as described in this book.

*Guest Reviewer, Albert N. Lemoine, M.D.
Chairman, Department of Ophthalmology
University of Kansas Medical Center
Kansas City, KS*

Analysis of Optometric Students, Academic Year 1975-1976

Douglas W. Redmond and Joan R. Allen, M.A.

An analysis of first through fourth year students enrolled in the schools and colleges of optometry in 1975-1976 was conducted by the Optometric Manpower Resources Project, American Optometric Association, between September 6, 1977, and September 29, 1978. A final report was presented to the Division of Associated Health Professions, Department of Health, Education and Welfare, as required under contract number HRA 231-77-0045. This article represents the findings of that analysis. The content of this publication does not necessarily reflect the views or policies of the Department of Health, Education and Welfare.

Douglas W. Redmond is Director of the Optometric Manpower Resources Project, American Optometric Association, and was principal investigator for the study. Joan R. Allen, M.A., was statistical consultant.

Introduction

For some time prior to 1975 the optometric community felt the need for detailed information about students enrolled in schools and colleges of optometry, particularly with respect to their financial resources for supporting their professional education. Some information was available on an individual school basis, but the lack of comparability of available data, both in content and format, among schools and colleges precluded the possibility of pooling and analyzing these data.

In the Spring of 1975, the representatives of the American Optometric Association (AOA), the Association of Schools and Colleges of Optometry (ASCO), and the Optometric Manpower Resources Project (OMRP) met to discuss the development and implementation of a survey of all students en-

rolled in the thirteen schools and colleges of optometry. Continuing discussions culminated in the design of a questionnaire to elicit the data felt necessary for describing the optometric student population. This questionnaire was to be distributed to all students during the registration periods for the fall 1975 term with the assistance of representatives of the American Optometric Student Association (AOSA). Two follow-up attempts were made during the academic year to elicit additional responses. The survey period ended in May, 1976. Unfortunately, repeated attempts to secure the cooperation of the University of California, Berkeley, School of Optometry failed, and no questionnaires were returned.

A limited amount of data was later obtained through the administration of the school. This presented some problems for data presentation and analysis

which are discussed in greater detail in the Methodology. All completed questionnaires were directed to the offices of the OMRP and locked in a private file room to insure confidentiality. Response rates by school and class were computed and adjusted as questionnaires were received. The overall response rate was approximately 70 percent of all first through fourth year students enrolled in the twelve participating schools and colleges of optometry for the academic year 1975-76. Due to lack of funds, further processing and analysis of these data were postponed until the award of this contract in September, 1977.

This report describes demographic, socioeconomic and financial resource characteristics of optometric students for 1975-76. Wherever comparable data were available from the 1970-71 survey of how health professions students finance their education, the data from the two survey periods were compared for time trends. The number of variables for which there was comparability was small, and thus, the analysis for trends was more limited in scope than desired. The body of the report presents analysis and discussion of findings.

Summary

Students at the thirteen schools and colleges of optometry were surveyed for demographic, socioeconomic and financial characteristics in 1975-76. Twelve of the thirteen schools participated in the survey and submitted student questionnaires. The Western census region was found to have the highest ratio of students to population. Overall, students indicated that they intended to practice in communities similar to those of their permanent residence.

Optometry students were, in large measure, white males. The median reported parents' income was approximately \$17,000. There was no relationship between students' year of study and median parents' income. There was also no apparent relationship between parents' income and school control (public or private). There was a weak association between father's highest level of education and student's year of study. The median available assets for financing optometric education were \$766.00 and were clearly related to class, with first year students reporting the greatest amounts. The median expected cost among survey respondents was \$25,781 for four years, and this also was clearly related to class, with

TABLE A

	Ratio ≤ 1.6 per 100,000	Ratio ≤ 1.6 per 100,000	TOTAL
Number of States with 1 or more schools	3	9	12
Number of States with no schools	25	14	39
Total Number of States	28	23	51

TABLE B

Census Region	Students Attending a School		TOTAL
	Within Region of Residence	Outside Region of Residence	
Northeast	749	129	878
North Central	877	198	1075
South	811	211	1022
West	615	74	689
TOTAL	3052	612	3664

first year students anticipating the highest costs.

This finding was in direct opposition to the findings reported for a 1970-71¹ survey, where fourth year students indicated the greatest costs. Eighty-two percent of the students anticipated being in debt for their optometric education, and the median amount was \$10,585. Parents and spouses provided the greatest average percent support among the seventeen sources listed on the questionnaire. Scholarships, on the average, provided very little support. Federal programs varied from 31.6 percent to 14.1 percent in the average percent of support provided. Overall, students drew on a wide variety of sources for financing their optometric education.

Geographic Distribution

State of permanent residence was requested of students as an indicator of where optometry students come from geographically and of the mobility of students in seeking optometric education, as well as the influence of school location on the ratio of optometry students to the resident population. The overall ratio of students who gave a state of permanent residence to the U.S. resident population was 1.8 students per 100,000 resident population. This ratio was highest in the West (2.1 per 100,000) and lowest in the South (1.5 per 100,000). The ratios in the Northeast and North Central regions were equal (1.9 per 100,000). On a regional basis, the number of schools was not a significant factor since each region

had three schools, with the exception of the North Central region which had four. This fourth school, however, had just opened and had only twenty-one first year students at the time of the survey. On an individual state basis, the ratio of students to population varied from 0.0 for the District of Columbia (implying only that there were no respondents from the District of Columbia) to 5.3 for Wyoming. The median ratio for the fifty states was approximately 1.6 students per 100,000 resident population. Using this median ratio as a dividing point, Table A shows the number of states with and without optometry schools with ratios of more and less than 1.6 students per 100,000 resident population.

The chi-square test for independence applied to this contingency table of ratio and presence of school yielded a statistic which was significant at the 5 percent confidence level ($X^2 = 6.09$; $X^2_{.05,1} = 3.84$). The inference that can be made is that indeed the presence of an optometry school in a state influences the number of state residents who pursue an optometric education.

The mobility of students in seeking optometric education is somewhat reflected by the diversity of the location of schools attended by the students from within a state or region. Table B gives the numbers of students from each region and how many were attending schools within their region.

As would be expected, there was a very strong association between the region of residence and the location of the school attended ($X^2 = 33.85$; $X^2_{.05,3} =$

APPENDIX TABLE 2A
Number of Optometry Students by State of Permanent Residence and School Attended: 1975-1976
(All Students)

Location	School / College of Optometry													
	Total	Berkeley ^a	State Univ. of New York	Alabama	Ferris	Houston	Illinois	Indiana	New England College of Optometry	Ohio	Pacific	Pennsylvania	Southern Calif. College of Optometry	Southern
Total	3900	236	103	107	21	268	571	280	285	217	303	552	364	592
U.S. Total	3663	126	94	105	21	257	568	263	245	213	289	538	354	590
Non-U.S.	23	0	3	1	0	5	0	4	2	0	5	2	1	0
REGIONS														
Northeast	878	6	93	1	0	0	48	15	225	4	11	431	23	21
North Central	1075	5	1	1	21	29	440	217	7	199	39	7	40	69
South	1022	2	0	102	0	220	42	24	10	5	9	99	20	489
West	689	113	0	0	0	8	37	7	3	5	231	2	271	12
DIVISIONS														
New England	241	2	0	1	0	0	4	1	168	0	8	45	7	6
Mid Atlantic	636	4	93	0	0	0	45	14	57	4	3	386	16	15
East North Central	807	4	1	0	21	3	316	204	7	199	9	7	21	15
West North Central	268	1	0	1	0	25	124	13	0	0	30	0	20	54
South Atlantic	459	2	0	25	0	13	36	17	9	4	6	97	14	237
East South Central	229	0	0	75	0	11	5	5	0	1	0	2	0	129
West South Central	334	0	0	2	0	197	1	1	2	0	3	0	6	123
Mountain	149	4	0	0	0	6	18	2	2	4	54	2	53	4
Pacific	540	109	0	0	0	2	19	4	2	1	176	0	218	8
STATES														
Alabama	66	0	0	64	0	0	0	0	0	0	0	0	0	2
Alaska	4	0	0	0	0	0	0	1	0	0	3	0	0	0
Arizona	26	1	0	0	0	2	3	0	0	0	8	2	9	2
Arkansas	55	0	0	0	0	2	0	0	2	0	0	0	0	52
California	346	108	0	0	0	2	11	2	2	0	14	0	201	6
Colorado	24	0	0	0	0	2	6	0	0	0	6	0	10	0
Connecticut	49	0	0	1	0	0	3	1	24	0	0	16	2	2
Delaware	11	0	0	0	0	0	0	0	0	1	0	7	1	2
District of Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Florida	128	1	0	7	0	11	15	5	2	0	6	10	8	62
Georgia	48	0	0	4	0	0	1	2	0	0	0	0	1	40
Hawaii	23	1	0	0	0	0	4	1	0	1	8	0	6	2
Idaho	12	0	0	0	0	0	0	0	0	3	6	0	3	0
Illinois	190	0	0	0	0	0	176	12	0	0	0	0	2	0
Indiana	182	0	0	0	0	0	4	172	0	0	0	0	5	2
Iowa	70	0	0	0	0	0	48	3	0	0	6	0	3	8
Kansas	47	0	0	1	0	14	5	0	0	0	2	0	5	21
Kentucky	40	0	0	8	0	10	3	2	0	1	0	2	0	15
Louisiana	46	0	0	2	0	11	0	0	0	0	0	0	1	31
Maine	28	1	0	0	0	0	0	0	16	0	2	7	1	2
Maryland	71	0	0	1	0	0	8	1	5	1	0	38	2	15
Massachusetts	132	1	0	0	0	0	1	0	107	0	5	16	2	0
Michigan	133	1	1	0	21	2	74	7	2	5	3	5	7	6
Minnesota	43	1	0	0	0	0	26	3	0	0	11	0	2	0
Mississippi	37	0	0	1	0	2	0	3	0	0	0	0	0	31
Missouri	37	0	0	0	0	3	19	5	0	0	0	0	1	8
Montana	27	1	0	0	0	0	6	0	0	0	17	0	3	0
Nebraska	40	0	0	0	0	5	9	0	0	0	6	0	6	15
Nevada	9	0	0	0	0	0	0	0	2	0	3	0	5	0
New Hampshire	10	0	0	0	0	0	0	0	7	0	2	2	0	0
New Jersey	77	0	5	0	0	0	1	3	3	0	0	59	2	2
New Mexico	16	2	0	0	0	3	0	0	0	1	3	0	7	0
New York	300	4	87	0	0	0	28	7	48	0	3	100	13	10
North Carolina	78	1	0	5	0	2	0	3	0	0	0	17	0	50
North Dakota	17	0	0	0	0	0	10	0	0	0	5	0	2	0
Ohio	225	0	0	0	0	0	11	5	5	191	3	2	3	4
Oklahoma	66	0	0	0	0	19	1	0	0	0	3	0	3	40
Oregon	115	0	0	0	0	0	0	0	0	0	113	0	2	0
Pennsylvania	260	0	1	0	0	0	15	4	5	4	0	227	1	2
Rhode Island	15	0	0	0	0	0	0	0	10	0	0	3	1	0
South Carolina	33	0	0	4	0	0	1	1	0	0	0	0	0	27
South Dakota	14	0	0	0	0	3	6	1	0	0	2	0	0	2
Tennessee	86	0	0	2	0	0	3	0	0	0	0	0	0	81
Texas	167	0	0	0	0	165	0	1	0	0	0	0	1	0
Utah	14	0	0	0	0	0	3	0	0	0	0	0	9	2
Vermont	7	0	0	0	0	0	0	0	3	0	0	2	0	2
Virginia	54	0	0	5	0	0	5	3	2	0	0	17	1	21
Washington	52	0	0	0	0	0	4	0	0	0	39	0	9	0
West Virginia	35	0	0	0	0	0	5	1	0	1	0	7	0	21
Wisconsin	75	3	0	0	0	2	51	9	0	3	3	0	3	2
Wyoming	20	0	0	0	0	0	0	2	0	0	12	0	6	0
UNKNOWN	214	110	6	1	0	6	3	13	38	4	9	12	9	2

SOURCE: Data—Survey of Students Enrolled in Schools/Colleges of Optometry, 1975-1976.

^aUninflated data—administratively obtained information only.

7.815). One would expect that the private schools would have students from a greater variety of regions, since residency would not have any effect on tuition. However, although six of the thirteen schools were privately controlled, there was little student mobility on a regional basis. The same was generally true on a state by state basis, with students showing a pronounced proclivity for attending the optometry school or schools closest to their states of residence. Students from Michigan were distributed over the greatest number of schools (12) and students from Alabama, Alaska, and Oregon, the fewest (2 each).

Another indicator of mobility is whether or not students intend to practice in a community similar to that of their permanent residence. Each student was asked to classify his community of permanent residence as rural, suburban or urban. He was also asked to indicate the type of community in which he intended to practice upon completion of his optometric training.

The percentages on the diagonal in Table C show that students from suburban and rural communities generally intended to practice in similar communities with very little shift to urban areas. Students from urban communities, however, seemed to have demonstrated more of an interest in shifting to less urban areas, particularly to suburban communities. Analogous data for each of the four classes indicated that the same inclinations were reported by students in each individual class as were evidenced overall.

Racial/Ethnic Background and Sex Distribution

Overall, 88 percent of optometry students were male and 12 percent female. Ninety-two percent of students were white, 7 percent were black, Asian or other, and 1 percent did not specify a racial/ethnic category. The proportion of minority students did differ by sex, as shown in Table D, with a noticeably greater proportion of female students who were other than white.

Among the thirteen schools, only Berkeley and the Southern California College of Optometry had less than 90 percent of male students who were white, with these concentrated in the Asian category. Berkeley and the State University of New York, State College of Optometry, both had almost one-half of their female students indicate that they were non-white.

Although it was intended to present

TABLE C

Type of Community of Intended Practice	Rural	Suburban	Urban	TOTAL
TOTAL	321 (100.0%)	1248 (100.0%)	947 (100.0%)	3016 (100.0%)
Rural	525 (64.0%)	158 (13.0%)	137 (15.0%)	820 (27.0%)
Suburban	240 (29.0%)	979 (78.0%)	363 (38.0%)	1582 (53.0%)
Urban	56 (7.0%)	111 (9.0%)	447 (47.0%)	614 (20.0%)

TABLE D
Percentage Distribution by Racial/Ethnic Category and Sex

	TOTAL	Male	Female
TOTAL	100.0	100.0	100.0
White	92.0	94.0	80.0
Non-White	7.0	5.0	19.0
Unknown	1.0	1.0	1.0

data for all students by racial/ethnic background and sex by class, the differential response rates by class interacted with the by-school inflation factors in such a way as to produce distorted class figures. Thus, this discussion is based on data from respondents only. Figure 1 shows the total numbers of students by sex in each class and the percentage of those who were non-white. The number of male students who responded was twice as great for the first year class as for the fourth year class and the number of female students was three times as great for the first year class as for the fourth year class. This may be due to the much lower response rate among fourth year students than for other classes. Nevertheless, the percentage of non-white males differed only minimally from class to class. The proportion of non-white female students, however, had a curious distribution. The proportion of non-white females was approximately 20 percent in the first and fourth years and only 10 percent in the second and third years. The reason for such a distribution is unclear.

Looking at the census division of permanent residence by racial/ethnic background, it was found that, as expected, the largest number of Asian students came from the Pacific division. The greatest proportions of black students came from the Mid-Atlantic and East North Central divisions. Although the Mid-Atlantic division accounted for 29 percent of black students, black students only comprised 3 percent of students from this division.

Socioeconomic Characteristics of Students' Parents

Students were asked to estimate their parents' combined annual income. Recognizing that this was a sensitive item, categories for "Prefer not to respond" and "Don't know" were provided to minimize the impact on the survey response rate. Approximately one-fifth of the students availed themselves of these response categories. Based on the responses of the students who specified an income category (N = 1946), the median parental income was approximately \$17,000 in 1975-76. The median parental income for optometry students reported in 1970-71 was approximately \$10,200. Allowing for income inflation at 5 percent per year yielded a 1970-71 adjusted median income of \$13,000 which was still quite a bit below the reported 1975-76 median income. However, allowing for higher rates of inflation quickly eroded the difference, until at an income inflation rate of 10 percent per year for the five-year interim period, the 1970-71 adjusted median income became \$16,400; only slightly less than the 1975-76 median figure. Even though inflation may have accounted for the apparent shift in the lower income categories, the proportion of students reporting parental incomes greater than \$20,000 appeared considerably larger for 1975-76 than for 1970-71.

Another approach to investigating trends in parental income, over time, is to compare the median parental incomes for each class year in 1975-76. Comparable data was not available for

the 1970-71 survey.

There was no apparent relationship between class and median parental income, and also there was no shift in socioeconomic status of optometry students, as measured by income, from 1971 to 1975, the entering years of these students.

A question often asked about optometry schools is whether or not they differ with respect to socioeconomic status. Table E shows the median incomes for each school. The schools are divided into two categories—state and private.

There was some apparent variation of median income, notably between the State University of New York and the Pennsylvania College of Optometry. However, using the overall median income as a dividing point, there was no significant difference between private and state schools with respect to median parental income.

Data for one additional socioeconomic indicator were collected from optometric students. Each student was

TABLE E

	N	Median Parental Income
1. State Schools^a		
SUNY	73	\$14,100
Alabama	76	14,500
Ferris	18	17,500
Houston	114	17,800
Indiana	208	17,300
Ohio	133	16,700
2. Private Schools		
Illinois	342	17,500
New England	119	15,600
Pacific	163	14,900
Pennsylvania	233	18,000
SCCO	243	17,600
Southern	228	17,300

^aBerkeley excluded: no responses available.

asked to indicate the highest educational levels of his father and mother. A combined variable of parents' education was generated from these responses. For 45 percent of the optometry students who responded to this item, the highest level of education was the same

for both parents. For 20 percent of the students, both parents had at least some college education. Only 6 percent of students reported that neither parent had completed high school. The categories used in the 1970-71 health professions' student survey¹ dealt with

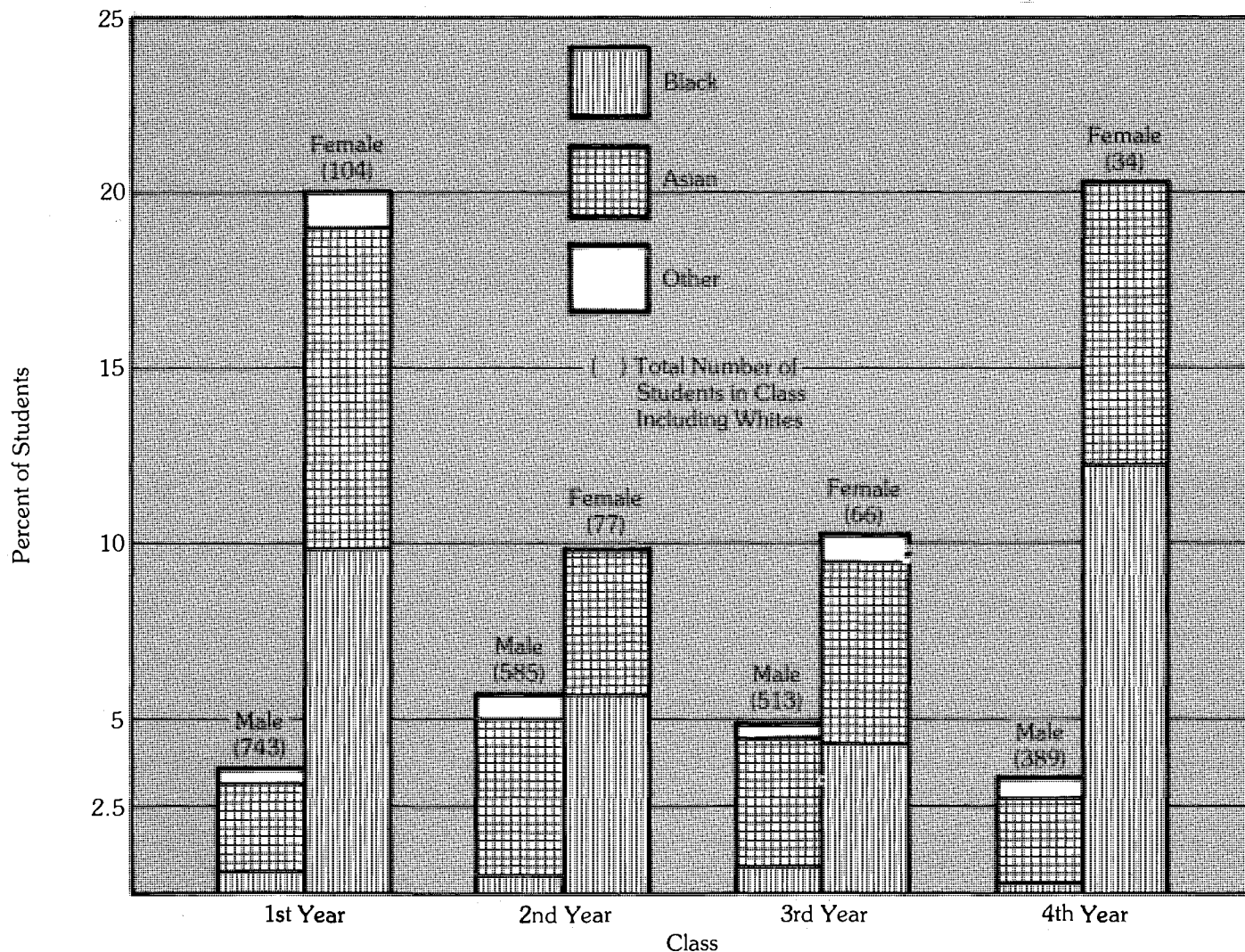


Figure 1. PERCENT OF NON-WHITE STUDENTS BY CLASS AND RACE

father's educational level only, but were similar enough to generate Table F for comparison.

There did seem to have been a shift in the highest educational level of fathers of optometry students. Although a slightly greater proportion of optometry students surveyed in 1975-76 reported that their fathers had not completed high school, 57 percent reported post high school education for their fathers in 1975-76 as opposed to 46 percent in 1970-71. This was particularly interesting in light of the fact that the comparison of parents' median income for the two survey years did not indicate an increase over time, once inflation was taken into account.

Another way to approach this question is to look at parents' education by student's class for the 1975-76 survey data alone. Table G was used to test for association of father's educational level with student's class. Chi-square for this table was significant at the 10 percent level, but not at the 5 percent level indicating a weak association between father's education and student's class.

It is interesting that over all schools, the parents' educational level reported most frequently was "both parents completed high school" (Table H) and that the categories in the other two columns of the table were not reported more frequently. It is somewhat surprising that there was noticeable variation among the schools and that the students from only two schools most frequently reported father's education as graduate or professional and mother's education as

TABLE F

Father's Highest Education Level	1970-71	1975-76
TOTAL	100.0%	100.0%
Not High School Graduate	10.0%	13.6%
High School Graduate or Vocational Training	34.0%	28.7%
Attended and/or Completed College	24.0%	32.7%
Graduate or Professional Training	22.0%	24.1%

TABLE G

Father's Education	Total	1st Year	2nd Year	3rd Year	4th Year
TOTAL	2446	822	642	566	416
Not High School Graduate	336	109	83	88	56
High School/Vocational	708	220	195	167	126
College	808	291	207	194	116
Graduate/Professional Training	594	202	157	117	118

college. The reason that this is of note is that it had been commonly believed within the profession that optometry students come in large measure from professional families which often have one parent who is an optometrist. The data in Table H were in opposition to this. Another point of interest is that in the schools whose students most frequently reported high school completion as the highest level of education for both parents, the proportions of those students were considerably greater than the proportions of students who reported either "Father College, Mother High School" or "Father Graduate or

Professional, Mother College" as the highest levels of parents' education.

Financing Optometric Education

Students were asked to estimate their current total dollar assets available for financing the remainder of their education, excluding loans, scholarships and anticipated earnings. Fully 28 percent of the students who gave an estimate reported assets of less than \$200 and only 17 percent reported assets of more than \$3,000. The median for available assets was approximately \$766. The median assets reported for each class are given in Table I.

TABLE H

School	Educational Level Reported by Greatest Proportion of Students	Proportion	Father College, Mother HS^a	Father GP^b, Mother College
Overall	Both High School	19.3	13.5	12.2
SUNY	Both High School	23.9	13.0	5.4
Ferris	Father College, Mother HS	25.0	25.0	0.0
Alabama	Both College	15.4	14.3	13.2
Houston	Father GP, Mother College	17.8	8.9	17.8
Illinois	Father GP, Mother College	16.2	14.1	16.2
Indiana	Both High School	24.2	12.7	10.3
New England	Both High School	21.1	11.8	10.6
Ohio	Both High School	24.8	18.8	8.5
Pacific	Both High School	22.6	10.3	11.8
Pennsylvania	Both High School	24.6	15.5	8.7
SCCO	Both College	20.5	14.0	14.0
Southern	Both College	16.4	12.8	12.5

^aHS = High School. ^bGP = Graduate or Professional Training.

TABLE I

Class	Median Assets
All Classes	\$ 766
First Year	1147
Second Year	710
Third Year	671
Fourth Year	477

There was clearly a relationship between class and assets, and indeed the chi-square for association was significant at the 1 percent level. It is not surprising that students' assets dwindle during their optometric education since few optometric professional programs provide the flexibility of schedule necessary for appreciable amounts of money to be earned.

The next question was whether or not the amount of available assets differed by school. There was no relationship between school control (private or state) and median student assets. The median available assets for each school are given in Table J in rank order.

TABLE J

School	Median Assets
SUNY	\$1235
Ohio	1031
Ferris	999
Illinois	883
Southern	844
SCCO	803
Pacific	786
Houston	780
Pennsylvania	722
New England	526
Alabama	499
Indiana	414

The school whose students had the highest median was SUNY, and this was about three times the median for Indiana students. This considerable variation was not related to school control nor was it related to the census region in which the school was located. There was also no apparent correlation with school rank by parents' median income. There were no comparable data available from the 1970-71 survey with which to make a comparison.

Students were also asked to approximate their expected costs for financing their four years of optometric education, including living expenses, tuition, supplies, etc. The median expected cost among survey respondents was \$25,781 for four years or a median annual cost of \$6,445. The 1970-71 survey reported an average annual ex-

pense of \$5,251, but it was not clear whether this was a mean or median figure. The mean expected cost for the 1975-76 survey respondents was \$26,008 or \$6,502 per annum (with standard deviations of \$7,876 and \$1,969, respectively). If the 1970-71 figure was a mean, comparison with the 1975-76 mean annual expected cost yields a 24 percent increase. Table K shows the median and mean total and annual costs for 1975-76 and the "average" annual costs for 1970-71 by class.

There was an apparent relationship between expected costs and class. For the 1975-76 survey data, chi-square for association was significant at the 5 percent level ($X^2 = 30.09$; $X_{.05,18} = 28.87$). The trend indicated by these data, that first year students expected their costs to be higher than fourth year students, is consistent with the economics of the period. It is of note that the 1970-71 data exhibited a trend in the opposite direction. Although the two questionnaire items differed somewhat,

this would not account for the trend reversal.

The median expected four year and annual costs were also examined for variation among the twelve schools for which data were available. In Table L, the schools are listed in rank order with respect to median four year expected cost.

This table shows considerable variation in students' expected costs for their optometric educations at the various schools. It should be noted here that all of the schools with median expected costs greater than the overall median (\$25,781) are privately controlled and all of the schools with median expected costs less than the overall median are state-controlled.

Future financial burden on the student was sought by asking each student to estimate his total indebtedness at graduation. Overall, for 82 percent of students responding, expected indebtedness was greater than zero, with a median of \$10,585. Table M

TABLE K

Class	1975-1976				1970-1971
	Median 4 Year Cost	Median^a Annual Cost	Mean 4 Year Cost	Mean^b Annual Cost	"Average" Annual Cost
TOTAL	\$25,781	6,445	26,008	6,502	5,251
First Year	26,311	6,578	26,268	6,567	4,668
Second Year	25,875	6,469	26,245	6,561	5,171
Third Year	25,559	6,390	25,848	6,462	5,669
Fourth Year	24,615	6,154	25,347	6,337	5,764

^aMedian annual cost = $1/4 \times$ median four year cost.

^bMean annual cost = $1/4 \times$ mean four year cost.

TABLE L

Rank	School	Median Expected Four Year Cost	Median Expected Annual Cost
1	Southern	\$31,726	\$7,932
2	New England	28,667	7,167
3	Pennsylvania	27,315	6,829
4	SCCO	27,235	6,809
5	Illinois	27,122	6,781
6	Pacific	27,083	6,771
7	Alabama	24,500	6,125
8	SUNY	20,714	5,179
9	Indiana	20,541	5,135
10	Houston	19,375	4,844
11	Ferris	18,545	4,636
12	Ohio	17,474	4,368

shows the proportion of each class who expected to be in debt and their median expected amount of indebtedness.

Not only did a greater proportion of the first through third year students expect to be in debt at graduation, but also they anticipated larger debts. This finding was consistent with the greater anticipated costs for the first through third year students. The questionnaire item on the 1970-71 survey relating to indebtedness was sufficiently different to preclude any comparison on this point.

The proportion of students with anticipated indebtedness and the median expected amount were also analyzed by school. Table N lists the schools in rank order by the proportion of students anticipating debts. The median expected indebtedness and the rank for that amount are also given.

It should be noted that Ferris had only a first year class at the time of this survey and a large proportion of these students responded that they did not know what their indebtedness would be. It is interesting that the median amount of expected indebtedness at a school did not vary consistently with the proportion of students at the school who anticipated any indebtedness. It is also of note that fewer than two-thirds of the students at Houston reported any expected indebtedness at all and for those that did, the median was the second smallest among schools.

Information about the sources available to optometry students for financing their education was a motivating factor in conducting this survey. Students were asked to indicate their sources and the percent of support provided by each source.

The seventeen possible sources listed in the questionnaire item, ranked by the average percent support provided by each source, the number of students contributing to the average, and the average percent support are shown in Table O.

As would be expected, parents and spouses provided the greatest amount of support for students who indicated them as a source. Scholarships contributed only a small percentage of support to the students who had indicated them as a source. It is interesting that summer employment was the most frequently reported source of support, but that the average percent support thus provided was only 17.5 percent. Clearly optometric students finance their educations from a variety of sources of which no single source, on the average, provides more than 50 percent support.

TABLE M

Class	Percent of Students With Expected Indebtedness	Median Amount
Overall	82.0	\$10,585
First Year	83.8	11,500
Second Year	83.9	10,716
Third Year	82.5	10,048
Fourth Year	75.5	8,773

TABLE N

Rank	School	Percent of Students	Median Debt	Rank
1	Ferris	93.8	6,500	10
2	Alabama	87.8	9,999	6
3	Illinois	86.0	11,486	3
4	SCCO	85.4	11,302	4
5	SUNY	84.5	8,778	8
6	Pacific	84.1	9,500	7
7	New England	83.4	10,606	5
8	Pennsylvania	83.2	> 12,000 ^a	1.5
9	Southern	82.1	> 12,000 ^a	1.5
10	Indiana	80.3	7,999	9
11	Ohio	70.5	5,500	12
12	Houston	64.4	6,267	11

^aMedian not computable; amount in open-ended category.

TABLE O

Source	Rank	Average Percent Support	Number of Students
Parents	1	46.8	1542
Spouse	2	43.6	896
Military	3	37.0	269
Federal Guaranteed Student Loan	4	31.6	986
Other Loan	5	26.2	264
Other	6	26.0	210
Health Professions Student Loan	7	20.7	793
Self (not work study)	8	18.5	860
Summer Employment	9	17.5	1575
State Scholarship	10	15.8	238
Health Professions Scholarship Program	11	14.1	263
Fellowship	12	13.8	22
Other Scholarship	13	12.9	86
Self (work study)	14	12.1	451
Private Industry Scholarship	15	10.1	19
School Scholarship	16	8.8	81
Optometric Society Scholarship	17	8.6	41

The rank order distributions of financial sources for each individual class year were very similar. The only notable class differences were that the average percent support provided by the military was lower for the first year class (28.5%) than for the other classes (second year, 43.4%; third year 42.8%; fourth year, 35.1%) and that the average percent support provided by fellowships was much lower for the fourth year class (9.8%) than for the other classes for which it was about 20 percent. The data presented on sources of income from the 1970-71 survey was not comparable with the 1975-76 data.

Pre-Optometric Education and Expected Activity of Students

It was hoped that students would provide adequate responses to the questionnaire item which asked that they list all post high school education, major field and degrees, if any, received. From this information, highest degree received and field in which awarded would be determined. However, only 62 percent of students provided usable data for this item. Based on the data provided by these students alone, the following are made as comments only. Approximately 85 percent of these students reported at least bachelor's level pre-optometric education. There were 9 percent with associate level degrees and 6 percent with master's level degrees. Only three students reported completing a doctoral level degree prior to entering optometry school. Among those students who responded to this item, 52 percent majored in the biological sciences. The next most frequently reported major field was the social sciences. None of the remaining major field categories was reported by 10 percent or more of the students. The proportion of students responding to this item by school varied drastically and, therefore, no analysis of these data was done.

As an attempt to get a feel for what students intend to do after completing their optometric educations, each was asked to indicate his initial and ultimate expected activity after graduation. Eighty-six percent of the respondents did complete this item. Although few students responded that they did not know what they would do (2.0% initial, 1.5% ultimate), a fair number checked more than one category (12.2% initial, 7.5% ultimate). A much larger number of activities was checked for initial rather than ultimate intended activity. Table P lists the most frequently reported activities and the percentages of students who so indicated for initial and ultimate activity. The six categories accounted for most of the students, as seen by the total percentages. It is of note that although approximately 24 percent of students expected to work for another optometrist initially, only 0.5 percent expected to be so engaged ultimately.

Looking at these same six categories of activity by class year, where they also account for most students, there were some interesting class differences. The percentage of students who expected to set up practice increased with increasing class year as an initial intended activity (11.8% to 19.4%), but decreased with increasing class year as an ultimate activity (55.4% to 39.6%). Conversely, the percentage of students who expected to enter a partnership decreased with increasing class year as an initial intended activity (23.4% to 18.3%) but increased with increasing class year as an ultimate activity (12.1% to 21.3%). The same pattern held for the percentages of students expecting to enter an optometric group. The proportion decreased with class year as an initial activity (6.9% to 3.0%) but increased with class year as an ultimate activity (5.0% to 7.3%). These reversals of intention may have been indicative of fourth year students being more familiar with and more realistic about optometric practice. □

TABLE P

Activity	Percent of Students	
	Initial	Ultimate
Set up Practice	13.2	49.3
Enter Partnership	21.7	15.5
Multidisciplinary Group	2.6	6.9
Enter Optometric Group	4.9	5.9
Work for Optometrist	24.3	0.5
Enter Military	6.0	0.2
TOTAL	72.7	78.3

Acknowledgements

Other key personnel assisting in this study were Barbara B. Shea, Assistant Director, Optometric Manpower Resources Project, and Fred E. Goldberg, O.D., student advisor. Data processing conducted by Control Data Corporation. Additional data and further detailed distributions are available in the final report under the following table headings:

1. Number of Optometry Students per 100,000 Resident Population: 1975-76.
- 2A. Number of Optometry Students by State of Permanent Residence and School Attended: 1975-1976. (All Students)
- 2B. Number of Optometry Students by State of Permanent Residence and School Attended: 1975-1976. (Survey Respondents Only)
3. Number and Percent of Optometry Students by Type of Community of Permanent Residence and Intended Practice: 1975-1976. (Survey Respondents Only)
4. Number of Optometry Students by Racial/Ethnic Background and Sex: 1975-1976. (All Students)
5. Number of Optometry Students by Racial/Ethnic Background, Sex and School Attended: 1975-1976.
6. Number of Optometry Students by Racial/Ethnic Background, Sex and Class: 1975-1976. (Survey Respondents Only)
7. Number of Optometry Students by Racial/Ethnic Background and State/Region of Permanent Residents: 1975-1976. (All Students)
- 8A. Number of Optometry Students by Parents' Income, School and Class: 1975-1976. (Survey Respondents Only)
- 8B. Percent Distribution of Optometry Students by Parents' Income, School and Class: 1975-1976. (Survey Respondents Only)
9. Number of Optometry Students by Parents' Education and Class: 1975-1976. (Survey Respondents Only)
10. Number of Optometry Students by School Attended and Parents' Education: 1975-1976.
11. Number of Optometry Students by Assets Available, School and Class: 1975-1976. (Survey Respondents Only)
12. Number of Optometry Students by Expected Costs, School and Class: 1975-1976. (Survey Respondents Only)
13. Number of Optometry Students by Expected Indebtedness, School and Class: 1975-1976. (Survey Respondents Only)
14. Optometry Students' Resources for Financing Optometric Education by Rank Order and Average Percent Support by Class: 1975-1976. (Survey Respondents Only)
15. Number of Optometry Students by Pre-Optometric Education, Major Field and Optometry School Attended: 1975-1976. (Survey Respondents Only)
16. Percent of Students by Class and Initial and Ultimate Intended Activity: 1975-1976. (Survey Respondents Only)

References

1. *How Health Professions Students Finance Their Education*. U.S. DHEW Publication No (HRA) 74-13, October 1973.

The Need for Relevant Practice Management in the Optometric Curriculum

John G. Classe, O.D., J.D.

Scene One: A Young O.D.'s Living Room

Young OD: "He promised me that I could buy into the practice, and since I had known him for a long time and trusted him, we just shook hands on it. Now it's been three years and all I've done is build up his practice. I still don't own any of the practice and he won't talk about a contract. I don't know what to do."

His wife: "Why didn't you get a contract in writing to start with?"

Scene Two: In a Lawyer's Office

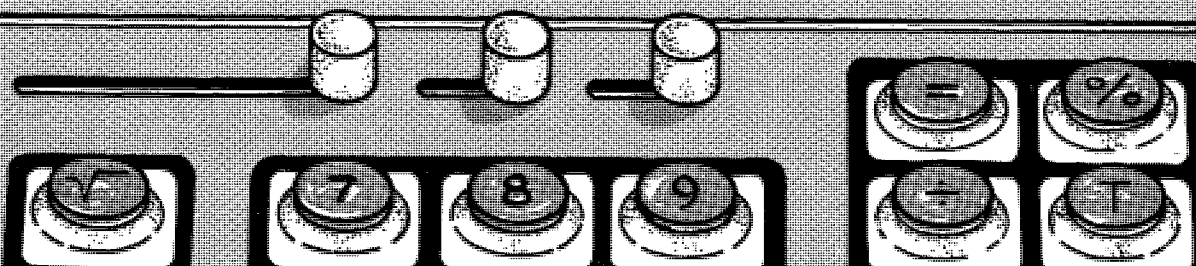
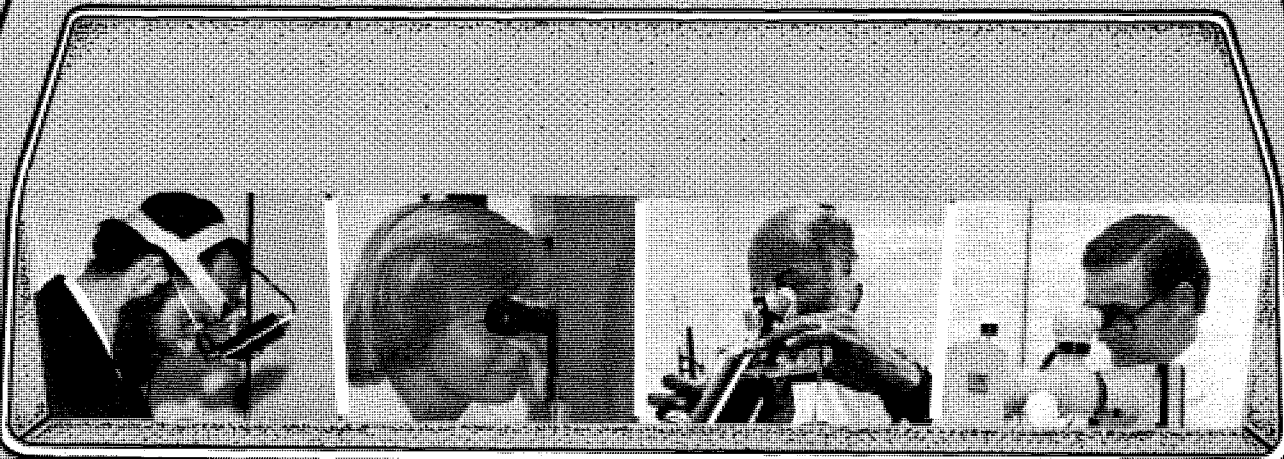
Young OD: "Are you telling me that since the equipment company gave a security interest to the bank, now the bank can take my stand and instruments if the equipment company goes bankrupt? But I've already paid for it! How is that possible?"

Lawyer: "It's possible because you didn't take the proper precautions to prevent such an eventuality when you bought your instruments. If you had just come to me then . . ."

Scene Three: The Local Watering Hole

Young OD: "I was so gung-ho that I went out my first year and grossed over \$90,000, but I didn't understand all the tax ramifications of what I was doing. I figured I would learn from experience. Boy, did I. I found at the end of the year that I owed IRS over \$10,000 that I had already spent. I'm still paying it back."

Bartender: "The drink will be two-fifty. In cash."



Horror tales? Or fairy tales?

If these stories sound more like fairy tales, welcome to the real world. These are true experiences, unhappy accounts of optometry students' indoctrination into private practice. I suspect that similar stories are repeated many times by young optometrists disenchanted with their baptism into the brave new world of professional practice. The question that they inevitably ask is, "Why did it have to happen to me?" I have an answer to their lament, and my answer is simple: at my school, as at all others, we do not adequately instruct our students in how to conduct their business affairs. We give it lip service by scheduling a few hours of instruction, but if we taught contact lenses or clinical refraction the way we teach practice management, we would rapidly lose our patients to other eye care providers because we would not be competent.

The Commercial Alternative

I am constantly amazed at the willingness of our graduates to take the plunge into the high finance of ethical practice, notwithstanding the rather substantial pecuniary remuneration and low risk that commercial practice offers. Most optometry school graduates are already in debt from four years of professional education, and the thousands of dollars of extra indebtedness that a commitment to private practice represents has to become somewhat burdensome. Nevertheless, it is the rare graduate that yields to the allure of quickie examinations and easy money. I attribute this rather remarkable willingness to bear the cross of professionalism to the thorough indoctrination that optometry students receive during their course of studies in optometry school. The virtues of ethical practice are constantly extolled and private practitioners who have "made it" are held up as sterling examples of the epitome of the art. But how can educators not feel a twinge of shame at their willingness to produce highly skilled graduates who may know how to provide health care but who do not know how to make a livelihood out of it?

I find this attitude—which I perceive to be pervasive throughout all the schools and colleges of optometry—to

be self-defeating. A student who is enthusiastic about ethical practice and who is ill-equipped to manage the business aspects of that practice, will make many serious mistakes, the cumulative effect of which is to leave a bad taste in his mouth, perhaps permanently. The result is a potential recruit for commercial practice.

Many times those in commercial practice are passed off by saying, "Well, he was the kind to go commercial anyway." I suspect that this form of statement is incorrect many more times than it is correct. Many of our brethren who are not in ethical practice have begun their careers in an ethical environment that met with financial failure and have turned to commercialism because it was the way out of poverty. Today, the

Many of our brethren have begun their careers in an ethical environment that met with financial failure and have turned to commercialism because it was the way out of poverty. Today, the large corporations that control the ophthalmic market can make highly attractive offers to struggling graduates. And once caught in the system, it can be quite difficult to escape.

large corporations that control the ophthalmic market can make highly attractive offers to struggling graduates. And once caught in the system, it can be quite difficult to escape.

How to Adequately Educate Our Students?

How can young people in their twenties who have done nothing but study science be adequately acquainted with the realities of law, finance, accounting and sound business management? Fortunately, today's optometry students are intelligent, motivated and understanding of their deficiencies. So, there is a willing audience. The problem be-

comes one of instruction, therefore, finding the proper personnel to teach a sequence of courses that illustrates the skills necessary to manage the complex world of the private practitioner. Remember: over 90 percent of optometry graduates go into private practice today, even though the cost of doing so is rising astronomically.

If this premise is accepted, then the first step is to create a professional curriculum that incorporates a thorough, systematic review of the many skills required to become an effective business manager. As part of this program, students must be sent into modern private practices in order to observe and to learn business techniques (and not clinical skills). And, most importantly, students must be constantly encouraged to obtain competent advice whenever they contemplate making a major decision about entering practice. Many students do not understand that a few hundred dollars spent for competent legal or business advice is well spent. Indeed, it is a small investment compared to the many thousands required to plunge into solo practice.

The majority of students just don't know how to go about finding someone to render this advice. Too often, friends, newly graduated optometrists or academicians are asked to provide words of wisdom and to direct the student. The usual result of this form of advice is the perpetuation of the mistakes of others. How many times are older practitioners—who truly should know better—relied upon, or given in to, with poor results? Gray hair does not automatically impart financial expertise, nor does the appearance of prosperity. Only the individual practice itself can reveal the skill of its director, and this requires a visit to the practice to see with one's own eyes how efficiently it is run.

Frankly, I have been disappointed in the business knowledge of even the well-established members of the profession in the private sector, and I feel that this deficiency is in some part attributable to educational shortcomings. Why are continuing education courses involving "practice management" denied credit? Quality courses that emphasize proven professional management techniques are badly needed. Surely the committees selecting continuing education lecturers can weed out the courses that are not worthwhile and can grant credit for those that are accepted for presentation. Financial success benefits one's family, one's community, even one's profession. In order to achieve that success, optometry gradu-

John G. Classe, O.D., J.D., is a faculty member at the School of Optometry/The Medical Center, University of Alabama in Birmingham, and instructs the fourth year professional students in legal, ethical and business aspects of practice.

ates cannot afford the luxury of mistakes. Our sister professionals who are beginning careers in medicine or dentistry have a system of guaranteed income (residencies) and guaranteed patient flow (through referrals) to bulwark the beginning physician or dentist against financial incompetence. Why optometrists do not refer to one another is a mystery, but that is another matter.

Gratefully, residencies are beginning to surface in optometry. But the point of all this is that private practice is becoming quite costly, with today's optometry graduate usually having to borrow twenty to fifty thousand dollars in order to get established. This typical graduate will never be so ill-prepared to handle this amount of money again in his lifetime. Educators in schools of optometry realize that the price tag attached to private practice has reached a critical level,

and yet the educational system perpetuates ignorance in fiscal matters. It does not adequately instruct students while they are in school, nor does it provide incentive for graduates already in private practice. This is a major shortcoming of the optometric curriculum and optometric continuing education programs.

Successful Private Practitioners Necessary

The success of this profession hinges on the success of the private practitioner, the solo or two or three man practice that can be found in communities, large or small, across America—the practitioners who truly permit optometry to tout itself as the primary health care provider. Their success is the profession's success. It doesn't make sense to handicap them, to discourage

them from this end, to turn them away from the very purpose that would make the profession strong. And the longer the need for adequate education in business management is not recognized, the easier it is for optometry's graduates to succumb to commercialism or other undesirable forms of practice. Our students want to be professionals and they want to be successful. The educational system has done a good job of instilling a professional attitude in them. Now it needs to face up to its responsibility and realize that a high sense of ethics is aided by competent business ability.

Optometry's biggest rival today is not ophthalmology. Rather, it is commercialism and corporate control of health care. And the educational institutions are supplying its unwilling employees. It is time we did something about it. □

Professional Development and Administration

Report of the ASCO Project Team on Professional Development Curriculum

In the development of the optometry curriculum model, one of the areas selected was professional development and administration. The recent Federal Trade Commission hearings and the various articles and discussions about ethical and commercial concepts of practice have focused considerable attention on how the curricula in the schools and colleges of optometry were preparing students for this aspect of optometry. A subcommittee of the Council on Academic Affairs of the Association of Schools and Colleges of Optometry (ASCO) was selected to prepare a practice development and administration curriculum model. The committee was composed of Dr. Clar-

ence McEachern, private practitioner, Columbia, South Carolina; Dr. Carroll Martus, private practitioner and part-time faculty member, The New England College of Optometry; Dr. Jack Runninger, private practitioner, Rome, Georgia; Dr. Morton Sarver, private practitioner and faculty member, University of California, Berkeley, School of Optometry; and was chaired by Dr. James Gregg, faculty member, Southern California College of Optometry.

The material in the subject area of professional development and administration is directed at developing an understanding of the feelings, issues, concepts, and social values related to the successful performance of the opto-

metrist in the profession, as well as his or her interrelationships with the entire social and health care delivery system. It explores and exposes the vital issues of needs, morals, ethics, law and professionalism. It is designed to develop organizational, communicative and management skills so that the optometrist can become knowledgeable and successful in the development and administration of a professional practice.

Following is the report of the committee presented to the ASCO Board of Directors at the Annual Meeting in Anaheim, California, on June 17, 1979.

PROFESSIONAL DEVELOPMENT CURRICULUM OUTLINE

Introduction

The introduction to any and all courses in the area of professional development should begin with a well-designed presentation concerning the importance of the course material. Since the subject matter often depends upon the enthusiasm of the person who teaches the course, and indeed upon the enthusiasm of the practitioner when he or she applies some of the principles covered in the subject, it is especially important that the students be "sold" on the great importance of the material itself. It is essential that this be stressed in each segment of the course and that the material be related to practical applications for the student so that it is easy to determine how relative the information will be in future practice. The instructor should emphasize the importance of the material as one of the keys to each graduate's future success.

An effective introduction to the course may be enhanced by the use of outside speakers, three recent graduates, for example, who have been successful, a practitioner who has been in the community for a number of years and is aware of the kinds of changes that have occurred in practice development material, or individuals giving testimonials as to the importance of the course. It might be helpful to have an individual from some other profession who either teaches practice management to students of that profession or is simply a specialist in the material covered in this particular subject lecture to the class.

It should be emphasized that many studies have shown that success in dealing with people, and in practice of a profession such as optometry in which people as patients are motivated by the practitioner, depends more on human relations than it does on knowledge about the technical details involved.

The introduction should also include listing of goals and objectives of the course. These should be precise and significant and be handed to the students in a written form. This could be easily done by the use of an audiovisual presentation which might serve to help students remember the importance of the course and impress upon them how significant it will be to their future success.

The class should be asked to think about the goals and objectives, and at the same time be requested to provide

some input as to what they think they should get out of the course and what topics particularly interest them. This could include the use of a questionnaire which each member of the class completes to indicate topics of major interest. It would seem wise each year to change emphasis, and perhaps the sequence of presentation of the material, in order to meet the needs of the class and changing times. It should not be implied that the course material is the same information taught year after year and can be learned from previous notes, tape recordings or even a textbook alone.

Questions and class discussion should be encouraged. This is essential with material that involves opinion and judgment. The subject of communications particularly cannot be learned as readily from reading notes as from being present to hear the presentation. This should be stressed with the class. Problems should be presented to the class for discussion or to serve as projects requiring written solutions. Videotape presentations illustrating the communication process should be utilized.

1. History of the Optometric Profession

This should include a brief overview of the development of optometry and some of the significant events in its history. Included should be a brief discussion of various basic sciences upon which the profession was founded, as well as the development of the clinical application of the knowledge about visual science and the organizational history of the profession.

References:

- Cox, *Optometry, The Profession*.
- Gregg, *History of the AOA*.
- Gregg, *Story of Optometry*.
- Hirsch & Wick, *The Optometric Profession*, chaps. 5, 6, 7.
- Levene, *Clinical Refraction and Visual Science*.

2. Optometric Education

A brief history of development of optometric education, various accrediting agencies that evaluate optometric education today, how a curriculum is developed in an optometric institution, increasing length of curriculum over the years, a brief description of each of the optometric institutions and their history. Included also should be a summary of the nature of optometric education.

References:

- Elmstrom, *Advanced Management for Optometrists*, chaps. 1 and 2.

Gregg, *History of the AOA*.
Havighurst, *Optometric Education*.
Hirsch & Wick, chap. 7.

3. Optometric Organizations and Societies

The role of optometric organizations as they relate to the optometric student and a new practitioner. History and development of various optometric organizations. An analysis of the significance of the various organizations on the growth of the profession. Membership requirements for different organizations and societies.

References:

- AOA *Directory*—Allied Organizations Roster.
- AOA, *Optometry Today*.
- AOA, *Scope and Function*.
Elmstrom, pp. 31, 35.
- Gregg, *History of the AOA*.
- Gregg, *Story of Optometry*, chap. 14.

Professional journals and publications.

4. Professional Ethics

Analysis of the history and development of ethics in the health professions. History of ethics in the optometric profession. Brief description of the codes of ethics of the American Optometric Association and various other optometric organizations.

References:

- AOA, *Information Kit*—"Code of Ethics" and "Standards of Conduct."
- AOA, *Office Policy/Procedure Manual*.
Elmstrom, pp. 88, 89.
- Gregg, *History of the AOA*.
- Hirsch & Wick, chap. 7; pp. 335, 336.

5. Legal Aspects of Optometric Practice

Certain introductory topics relating to legal aspects should be presented at this point in the student's training. Topics might be: how optometry is regulated by law and regulation, state board functions and powers, major court decisions concerning practice of optometry, the lawmaking process, FTC and FDA rules, the licensing process, reciprocity, and causes for revocation of licenses. However, in-depth study of legal aspects relating to the practice itself and patient relationships including malpractice is also recommended. This material might fit more appropriately after the student has more training in practice administration. A more detailed outline of the entire subject is attached at the end of this outline.

References:

- Annas, *Rights of Hospital Patients*, chaps. 3, 6, 7, 8, 10, 11, 12.
Coblens, *Optometry and the Law*.
Elmstrom, pp. 120-122, 141-144, 385-400, 417, 466.
Elmstrom & Kohn, *Synopsis of Legal Aspects*.
Simmons, *Synopsis of Jurisprudence*.

6. The Scope of Optometric Practice

Analysis of the broad scope of optometric practice and a description of the specialty areas. Definition of the term *optometry* as per COIT and COPT. Analysis of primary, secondary, and tertiary health care. Statutory definitions of optometry and the legal scope of the practice. Relationship of the scope of practice to the future of the profession in third party health care plans.

References:

- AOA, *Current Optometric Information and Terminology*.
AOA, *Current Optometric Procedure and Terminology*.
AOA, *Office Policy/Procedure Manual*.
The Blue Book of Optometrists (sections on state laws).
Coblens, *Optometry and the Law*.
Copies of individual state laws.

7. Types of Practice

A. *Sole Proprietorship*. This should include an analysis of the advantages and disadvantages of practicing as a solo practitioner and describe practitioners involved in office sharing practices, interprofessional practice (i.e., practicing with members of other professions) and interprofessional practice in which more than one member of the profession is involved in the office sharing plan.

References:

- Coblens, chap. 7.
Gregg, *Business of Optometric Practice*, chaps. 1, 4 and 7.

B. *Partnership Practice*. Description of advantages and disadvantages of practicing with a partner including various kinds of partnership agreements and how they are determined.

References:

- Elmstrom, chap. 7.
Gregg, *Business of Optometric Practice*, chaps. 3, 4, 5.
Lane, chap. 1.
Milkie, *Partnerships*, pp. 1-86, 121-139.

C. *Professional Corporations*. A description of the advantages of professional corporations and their limitations. The legal aspects involved and how to set up a corporation.

References:

- Gregg, *Business of Optometric Practice*, chap. 28.
Lane, chaps. 3 and 4.
Milkie, *Partnerships*, pp. 141-182.
Ray, pp. 29-53.

D. The Optometric Employee.

1. Working for optometrists and ophthalmologists.
2. Independent contractor—optometric practice, industry, schools, screening, teaching, community health centers, corporate business employee.

References:

- Elmstrom, Appendix.
Milkie, *Partnerships*, Appendix.

E. *Health Maintenance Organizations and Clinics*. The optometrist's role in such groups. A description of guidelines an optometrist should use in determining working conditions in such employment.

References:

- AOA, *Manual on Optometry and HMO's*.
Elmstrom, pp. 79-83.
F. *Military, Civil Service, Veterans Administration, Public Health Service, Indian Health Service, etc.* An analysis of the present situation concerning optometric employment in various government agencies.

G. *Research and Teaching*. An analysis of the pros and cons and opportunities for teaching and research in optometry. What qualifications the individual should have and where to seek opportunities.

8. Practice Evaluation

How to determine the value of a practice and how to develop buy and sell agreements. A description of the legal details involved and methods for obtaining outside consultations.

References:

- Elmstrom, chap. 6.
Gregg, *Business of Optometric Practice*, chap. 6.
Milkie, *Partnerships*, pp. 87, 119.

9. Financing Establishment or Purchase of a Practice

A description of various methods for financing a practice and the obtaining of loans and preparing a proposal to a lending institution.

References:

- Elmstrom, chap. 6.
Gregg, *Business of Optometric Practice*, chap. 8.
Lane, chap. 9.

10. Guidelines for Establishing and Developing the Beginning Practice

The amount of space needed, costs involved, tax considerations, employment of assistance, getting known in the community, purchasing of equipment and materials, etc.

References:

- Gregg, *Business of Optometric Practice*, chaps. 13, 17, 19.

11. Practice Location

Personal factors involved in selecting a practice location. Opportunity factors in terms of size of the area, economic factors, analysis of the community, and the specific factors which relate to the area within the community such as social, economic and the need for optometric service. Demographic studies, statistics and sources of information for making decisions concerning location.

References:

- AOA, "Opinion Poll—Economic Survey" (1978, available from the AOA office but not published).
Archives of Ophthalmology, Vol. 92, November 1974.
The Blue Book of Optometrists.
Elmstrom, chap. 5.
Gregg, *Business of Optometric Practice*, chap. 2.
U.S. DHEW, *Licensed Optometrists in the United States*.
U.S. Dept. of Commerce, *Current Population Reports*.

12. Office Design

The layout of an office and its functional qualities to be taken into consideration. Matters of decoration and decor and sources of information. Analyzing the office in terms of its efficiency.

References:

- "AOA Office Slide Series," 1974.
Elmstrom, chap. 14.
Gregg, *Business of Optometric Practice*, chap. 10.

13. Taxes

A. *Federal Taxes*. *Your Federal Income Tax*, IRS Publication #17. *Tax Guide for Small Business*, IRS Publication #33A. *Employer's Tax Guide*, IRS Publication #15, circular E. Kamoroff, B. *Small Time Operator*.

B. State Taxes. *Employer's Tax Guide for Withholding Payment and Reporting of State Income Tax.*

C. County Taxes.

D. City Business and Professional Code Taxes.

14. Standard Office Policies and Procedures

The development and use of an office policy procedure manual. Recall systems, making appointments, public relations, record keeping systems, policies that relate to employees, staff meeting, and other details relating to office procedures.

References:

AOA, *Office Policy/Procedure Manual*.

Elmstrom, chap. 10.

Gregg, *Business of Optometric Practice*, chap. 15.

15. Paraoptometric Personnel

Utilization of paraoptometric personnel and assignment of duties, development of office policies relating to personnel, the employment of paraoptometric personnel, managing the optometric office in regard to personnel.

References:

Bates, *The Optometric Assistant*.

Elmstrom, chap. 8.

Frederick & Kuhn, *The Office Assistant in Medical Practice*.

Gregg, *Business of Optometric Practice*, chap. 17.

Kuhn, *Dear Judi*.

Shore & Shore, *How to Hire for the Professional Office*.

Stein & Slatt, *The Ophthalmic Assistant*.

16. Insurance

Personal, office, professional liability, and various kinds of insurance needed by the optometrist. A listing of priority of purchase of insurance. Various practice policies such as:

- a. Professional liability (malpractice insurance)
- b. Public liability and property damage
- c. Fire
- d. Burglary
- e. Vandalism
- f. Overhead insurance
- g. Workmen's compensation
- h. Package policies

Personal Policies:

- a. Disability income, also termed health and accident insurance
- b. Partnership life insurance
- c. Health insurance

d. Major medical

e. Life insurance

References:

AOA portfolio of insurance coverages.

Elmstrom, pp. 419, 424.

Gregg, *Business of Optometric Practice*, chap. 26.

Milkie, *Partnerships*, chap. 15.

17. Bookkeeping and Accounting

I. Introduction

- A. Requirements and time schedule
- B. Text and course construction

II. Accounting Concepts

- A. Four principles of accounting
 1. Reasons and interaction
 2. End results—net income and financial position
 3. Accounting entities
 4. Cash vs. accrual
- B. Evolution of Accounting Systems

1. Single Entry

- a. Examples
- b. Reasons

2. Double Entry

- a. Equities and ownership
- b. Assets
- c. Basic equation
 - 1) Construction
 - 2) Interaction

3. Pegboard systems

C. Recording Transactions

1. Methods
2. Equation reactions

D. Summaries

1. "T" Accounts
2. End of period

E. Financial Statements

1. Income and expense statement
2. Balance sheet

F. Management Information

References:

Carlson et al., *Accounting Essentials*.

Control-O-Fax Pegboard Accounting Kit.

Elmstrom, pp. 214-217.

Gregg, *Business of Optometric Practice*, chap. 11.

Histacount literature.

Professional Budget Plan literature.

Tax Guide for Small Business, IRS Publication #334.

18. Optometric Fees

1. Historical development
2. Factors used to determine fees
3. Fee systems
4. Presentation of fees
5. Third party vision care programs
6. Assignment of benefits, recourse, etc.

References:

AOA, *Manual on Third Party Vision Care Benefits Programs*.

Elmstrom, chap. 9.

Gregg, *Business of Optometric Practice*, chap. 18.

Levoy, *\$100,000 Practice*, chaps. 10 and 11.

19. Optometric Income

1. Income in various types of optometric practice such as solo partnership and third party systems.

2. Optometric income as an employee.

3. Specialty optometric practices.

4. What the statistics show concerning choosing a location and type of practice.

References:

AOA, "Opinion Poll—Economic Survey."

Elmstrom, pp. 36-39.

Gregg, *Business of Optometric Practice*, chap. 5.

20. Collection of Fees

1. Criteria for granting credit.

2. Credit policies of the office.

3. Collection systems and use of collection agencies.

4. Legal implications of granting credit including the truth in lending law.

References:

Elmstrom, pp. 404-417.

Gregg, *Business of Optometric Practice*, chap. 24.

21. Patient Relations and Communications

It is suggested that the material in this topic area might be presented as a separate course in the optometric curriculum. It might be taught by someone with expertise in this area, or by the use of a number of guest speakers. It could be titled: *A Course in Human Relations and Patient Communications*. Among the topics to be covered should be the following:

- Communicating with patients by telephone.
- Greeting patients in the office.
- How to talk to patients in the case history taking process, and during the office procedures.
- Demonstrating the visual problems the patient has.
- Answering patient's questions before they are asked.
- Use of videotapes in class to demonstrate proper patient handling techniques.

- Explaining to the patient how his visual problem will be corrected.
- The use of certain communications formula such as:

1. Say it simply.
2. Prove it.
3. Answer the unasked question, "What is in it for me?"
4. Repeat that answer.

- Techniques recommended for health professional in relating to patients. Five questions should be answered whether asked or not.

1. What's wrong?
2. What caused it?
3. What are you going to do about it?
4. How much does it cost?
5. How long does it take?

- Importance of communicating in simple language.

- Importance of communicating in terms of the patient's interests, not the optometrist's.

- The importance of patient's relation with third parties.

- Emphasize the fact that surveys show 15 percent of success depends upon technical skill and 85 percent on human engineering skills.

- Patients do not care how much you know until they know how much you care.

- Communicating with special kinds of patients:

1. Communicating with mentally retarded.
2. Communicating with deaf and hard of hearing.
3. Communicating with very young patients
4. Communicating with patients who have psychosis and neurosis.
5. Professional use of hypnosis.

References:

- Carnegie, *How to Win Friends*.
 Gregg, *Business of Optometric Practice*, chap. 19.
 Gregg, *How to Communicate*.
 Levoy, *\$100,000 Practice*.

22. Professional Public Relations

A. Internal Public Relations

1. Use of vision service reports to patients.
2. Various pamphlets and published material such as from the AOA Bulletinboard.
3. Office grooming.
4. Patient education.
5. Audiovisual systems.
6. Flowers in the office, etc.
7. Newsletters.
8. Office decor and demeanor.

B. External Public Relations

1. Professional advertising.
2. Mailing materials to patients or community groups.
3. Joining clubs.
4. Buying in the community.
5. Taking part in community activities, such as fund raising.
6. Having other people speak for you such as the school teachers and representatives of third party systems.

C. Intra and Interprofessional Relations

1. Guidelines
2. Letter writing.
3. Personal contacts.

References:

- AOA audiovisual aids.
 AOA film, "Your Vision, Your Life."
 AOA package libraries.
 AOA pamphlets.
 AOA, *Consumer Advice on Vision Care*.
 AOA, *Contact Lens News Backgrounder*.

- AOA, *Guidelines for Improving Relations Between Optometry and Ophthalmology*.

- AOA, *Speaker's Service Guidebook*.

- Elmstrom, pp. 43-67.

- Gregg, *How to Communicate*.

- Levoy, *\$100,000 Practice*.

- Advisory Enterprises publishes patient education materials in the form of booklets, patient reports and newsletters.

23. Third Party Vision Care Plans

- Vision service corporations.

- Social Security, Titles 18 and 19.

- Federal programs which include optometry.

- Industrial vision plans.

- Insurance, commercial and private, including vision care.

References:

- AOA, *Manual on Third Party Vision Care Benefits Programs*.

- AOA, *Optometry in Federal Programs*.

24. Retirement Plans

- Keogh & IRA (Individual retirement account).

- Professional corporations.

- Investments, etc.

- Package libraries available from

- AOA library—Practice

- Administration Series:

- 200 Starting a Practice

- 201 Office Location, Design and Facilities

- 202 Remodeling Your Office

- 203 Buying or Selling an Optometric Practice
- 204 Associate, Partnership and Group Practice
- 205 Paraoptometric Personnel
- 206 Optometric Assistants (Secretarial and Clerical)
- 207 Patient Recall Systems
- 208 Office Instruments and Equipment
- 209 Referral Relationships—To and From Other Health Care Providers
- 210 Public Relations and Patient Communications
- 211 Doctor-Patient Relationship
- 212 Office Management Systems
- 213 Financial and Estate Planning
- 214 Practice Succession—What the Widow Needs to Know
- 215 Billing and Collecting

Also see related package libraries:

- 85 Computers in Vision Care
- 128 Problem Oriented Optometric Records (P.O.O.R.)

Legal and Organizational Aspects of Optometry

1. Consumer Rights and Privileges

Z-Law

Freedom of choice

Privileged information, confidentiality

Freedom of information/privacy act

Equal employment opportunity

Credit bureau disclosure

School, insurance, employment records

Medical information

Criminal records

Use of the social security number

2. Patient's Records

Ownership and access

Dropball testing data

Z-Law

Statute of limitations on specific sectors of patients

Statute of limitations on collection

3. Contracts and Leases

Employment agreements

Association agreements

Partnership agreements

Corporation buy-sell agreements

Leasing-equipment, property

4. Malpractice Philosophy and Insurance

5. Common Causes to Instigate Malpractice

Abandonment

Failure to refer

Failure to abide with standard procedures

- Failure to give or provide proper instructions
 - Failure to keep adequate records
 - Dispensing solutions
 - Improper use and maintenance of instruments.
 - Failure to provide regular recalls and/or progress evaluations
 - Product liability
 - Respondent superior
6. *Defense to Malpractice*
 - Statute of limitations (latent, discovery rule, last treatment)
 - Non-success
 - Assumed risk
 - Contributory negligence
 7. *Accepted Principles for Malpractice*
 - Standard of care (forbids, neglects)
 - Negligence
 8. *Seventeen Ways to Avoid Malpractice*
 - Attitude
 - Delegation
 - Checking equipment
 - Statute of limitation
 - Legal duties
 - Good principles of practice
 - Accurate history and comprehensive examination
 - Making statements to the patient
 - Over-optimistic prognosis
 - Criticism of professionals
 - Complete and thorough professional care
 - Confidential matters
 - Abandonment
 - Undue familiarity
 - Fees
 - Proper selection of contact lens patients
 - Professional liability insurance
 9. *Concept of res ipsa loquitur*
 10. *Common Law*
 - Doctor-patient relationship
 - Acceptance of new patients
 - Dismissing patients
 - Service with no compensation
 - Patients who move away requiring care
 - Standards of care
 - Legal duties of a specialist
 - Substitute professional care
 - Risks involved in therapy
 - Side effects of drugs
 - Patients who are not of legal age
 - Termination of the doctor/patient relationship
 - Withdrawal from professional care
 - Temporary leave of absence
 - Recognized and acceptable treatment
 11. *Court Decisions and the Profession*
 - Federal Trade Commission—fair trade practice (U.S. Sup Ct)
 - Bates vs. Arizona (U.S. Sup Ct)
 - Gibson Berryhill (U.S. Sup Ct)
 - Helling Carey (Wa.)
 - Tempchin Sampson (Md.)
 - Texas Decision (U.S. Sup Ct), Friedman vs. Rogers
 12. *The Optometrist in Court*
 - How to prepare for the courtroom
 - Small claims court
 - Ordinary witness
 - Expert witness
 13. *Collections*
 - Statute of limitations
 - Guidelines to collection
 - Credit bureau and the collection agencies
 - Legal credit criteria
 - Small claims court
 14. *Optometric Licensure and State Boards of Optometry*
 - Components (monopoly, qualifications, grandfather clause, suspension, revocation)
 - Unprofessional conduct
 - Protection of the public
 - Consumer complaints and hearings
 - Independent, semi-autonomous, integrated boards
 15. *AOA Code of Ethics*
 16. *AOA Standards of Conduct*
 17. *Federal Programs including Optometry*
 18. *Federal Trade Regulations*
 19. *Federal Drug Administration—Impact Resistant Lenses*
 20. *American National Standards Institute*
 21. *Policy on Vision Care Benefit Program*
 22. *Guidelines for Vision Care Benefit Program*
 23. *Guidelines on Optometric Consultants*
 24. *Peer Review Guidelines*
 25. *Health Systems Agencies*
 26. *Taxes—Depreciation*
 27. *Review of the State Law of Optometry*
 - Review the regulations and amendments
 - Mandatory reporting of the legally blind
 - Identifying and reporting conditions of child abuse
 28. *Professional Responsibilities*
 - Proper use of the word “diagnosis”
 - Advice to patients and recording data
 - Recording all complaints and complete history
 - Use of photography and/or drawing conditions
 - Full explanations with printed material
 - Use of friends or relatives to explain conditions
 - Explaining the urgency of a referral
 - Referral procedures
 - Follow-up and collaborating with the other health care provider and patient
 - Health education
 - Record keeping and altering the records
 - Maintaining the continuing education records for future needs so as to prove one’s level of competence in regard to the standards of the profession
 - Updating equipment and procedures
 - Maintaining and updating office policy
 - Delegating and monitoring the assistants and technicians

Summary of Recommendations

1. Text in professional development be written for optometry students.
2. AOA develop a plan to supply information to instructors in professional development.
3. ASCO develop a plan to supply information to instructors in professional development.
4. Material on optometric history and orientation be taught in the first year.
5. Information concerning analysis of community and practice location be taught no later than the end of the third year.
6. A separate course be taught concerning human relations and communicative skills.

7. Outside speakers with expertise in specialized areas of business and law be utilized.
8. A conference be held to develop guidelines concerning the teaching of certain "commercial" aspects, consumerism, and probable fundamental changes in the nature of future optometric practice.
9. Field trips to practitioner's offices be included as part of the professional development curriculum.
10. All topics in the curriculum outline should be covered in as much depth as possible.
11. One person at each school be designated as liaison for contacts and materials on professional development.

Legal Bibliography

- Annas G: *The Rights of Hospital Patients*. New York, Avon Books, 1975.
- AOA Bulletins from Legal Counsel.
- Archetypal National Health Insurance Plans. U S DHEW Pub No (HRA) 75-1, 1974.
- The Blue Book of Optometrists* (sections on state laws), ed 34. Chicago, The Professional Press, 1978.
- Coblens S: *Optometry and the Law*. St. Louis, American Optometric Association, 1976.
- Curran, Shapiro: *Law, Medicine and Forensic Science*. Boston, Little Brown and Company, 1970.
- Elmstrom G: *Advanced Management for Optometrists*. Chicago, The Professional Press, 1974.
- Elmstrom G, Kohn H: *Synopsis of the Legal Aspects of Contact Lens Practice for Optometrists*. Minneapolis, Burgess Publishing Co, 1974.
- Health Centers and Optometry*. Washington, DC, American Optometric Association, May 1979.
- Health Maintenance Organizations*. U S DHEW Pub No (HRA) 75-4, 1974.
- Hofstetter H: *Optometry: Professional, Economic and Legal Aspects*. St. Louis, CV Mosby Co, 1948.
- Holder A: *Medical Malpractice Law*. New York, John Wiley & Sons, 1975.
- King J: *The Law of Medical Practice in a Nutshell*. St. Paul, West Publishing Co, 1977.
- Lane MJ: *The Doctor's Lawyer, A Legal Handbook for Doctors*. Springfield, IL, Charles C. Thomas Co, 1974.
- Mallen, Levit: *Legal Malpractice*. St. Paul, West Publishing Co, 1977.
- Manual on Third Party Vision Care Benefits Programs*, ed 2. Washington, DC, American Optometric Association, July 1979.
- Milkie G: *Partnerships and Professional Corporations*. St. Louis, American Optometric Association, 1972.
- Optometry and Health Maintenance Organizations*, ed 2. Washington, DC, American Optometric Association, May 1979.
- Optometry in Federal Programs*, Revised ed. Washington, DC, American Optometric Association, 1979.
- Professional Standards Review Organization Manual*. Washington, DC, American Optometric Association, 1975.

- Ray G: *Incorporating the Professional Practice*. Englewood Cliffs, NJ, Prentice Hall, 1977.
- Rothschild DP, Carroll DW: *Consumer Protection*. Cincinnati, Anderson Publishing Co, 1977.
- Simmons E: *Synopsis of Jurisprudence for Optometrists*. Minneapolis, Burgess Publishing Co, 1963.
- Tax Guide for Small Business*. U S Dept of Treasury, Internal Revenue Service Pub No 334, 1979.

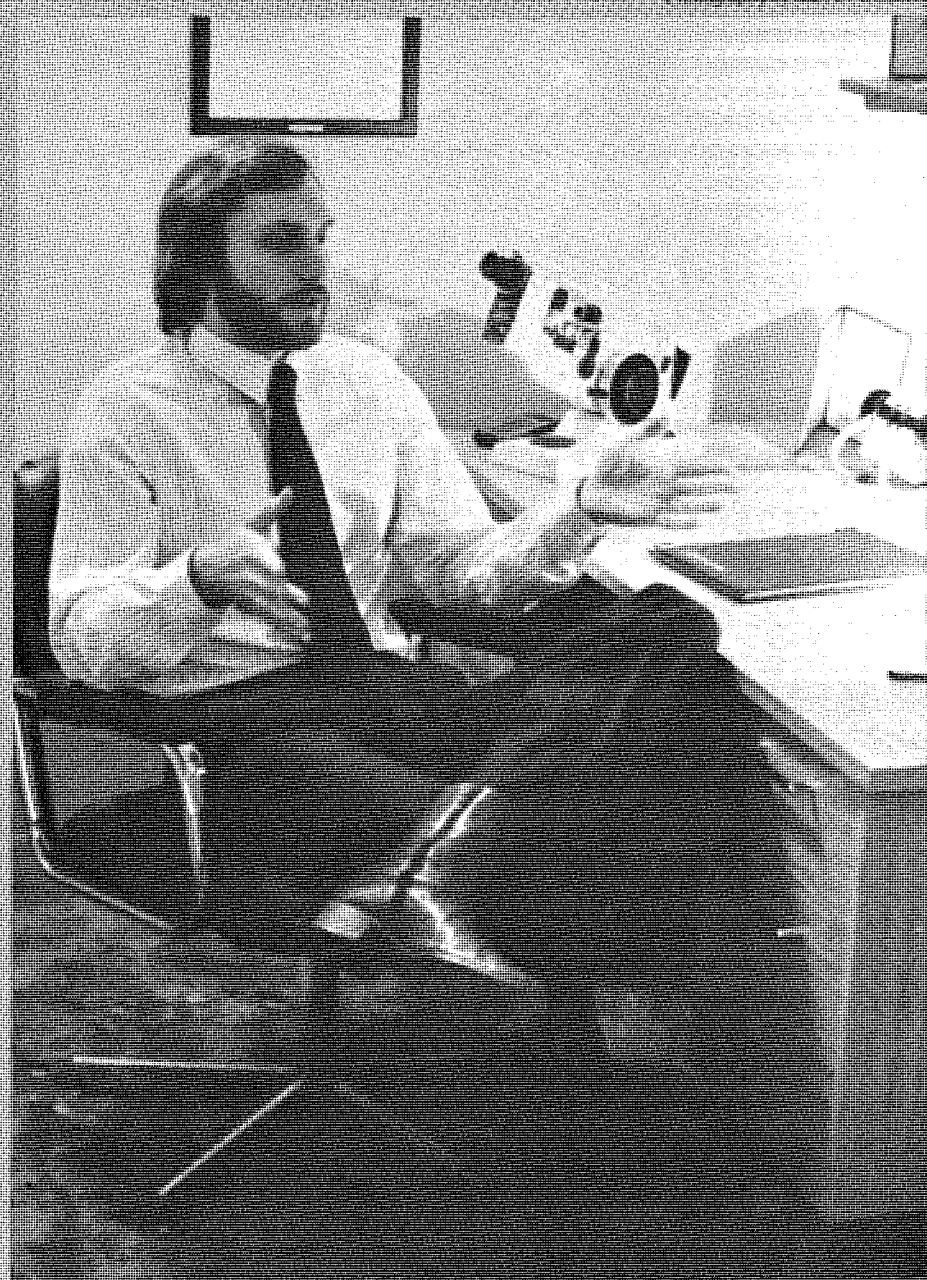
Professional Development Bibliography

- American Optometric Association Directory, 1979-1980*. St. Louis, American Optometric Association, September 1979.
- AOA audiovisual aids.
- AOA Office Slide Series. St. Louis, American Optometric Association, 1974.
- AOA package libraries.
- AOA pamphlets.
- AOA portfolio of insurance coverages.
- Archives of Ophthalmology*. Vol 92, November 1974.
- Bates SS: *Fundamentals for the Optometric Assistant*. Philadelphia, Chilton Co, 1970.
- The Blue Book of Optometrists*, ed 33. Chicago, The Professional Press, 1976.
- Carnegie D: *How to Win Friends and Influence People*. Los Angeles, S & S Enterprises, 1936.
- Carson AB, Carlson AE, Burnet ME: *Accounting Essentials for Career Secretaries*, ed 3. Cincinnati, Southwestern Publishing, 1972.
- Consumer Advice on Vision Care: A News Backgrounder*. St. Louis, American Optometric Association, August 1978.
- Contact Lens News Backgrounder*. St. Louis, American Optometric Association, April 1978.
- Control-O-Fax Pegboard Accounting Kit. Available from Control-O-Fax, Waterloo, Iowa.
- Cotton H: *Medical Practice Management*. Oradell, NJ, Medical Economics, 1977.
- Cox ME: *Optometry, The Profession: Its Antecedents, Birth and Development*, Revised ed. Philadelphia, Chilton Co, 1957.
- Current Population Reports—Population Estimates and Projections*. U S Dept of Commerce, Bureau of Census, Series P-25.
- Day RE, et al: *Current Optometric Procedural Terminology*. St. Louis, American Optometric Association, 1977.
- Elmstrom GM: *Advanced Management for Optometrists*. Chicago, The Professional Press, 1974.
- Frederick PM, Kinn ME: *The Office Assistant in Medical Practice*. Philadelphia, W B Saunders Co, 1967.
- Gregg JR: *American Optometric Association, A History*. St. Louis, American Optometric Association, 1972.
- Gregg JR (ed): *The Business of Optometric Practice*. White Plains, New York, Advisory Enterprises, 1975.
- Gregg JR: *How to Communicate in Optometric Practice*. Philadelphia, Chilton Co, 1969.
- Gregg JR: *The Story of Optometry*. New York, The Ronald Press, 1965.
- Gregg JR: *Your Future in New Optometric Careers*. New York, Richards Rosen Press, 1978.
- Guidelines for Improving Relations Between Optometry and Ophthalmology*. St. Louis, American Optometric Association, 1972.
- Havighurst RJ: *Optometric Education: A Summary Report*. Washington, DC, National Commission on Accrediting, 1973.

- Hirsch M, Wick R: *The Optometric Profession*. Philadelphia, Chilton Co, 1968.
- Histaccount literature. Available from Histaccount Corporation, Melville, New York 11746.
- Hofstetter H: *Optometry: Professional, Economic and Legal Aspects*. St. Louis, CV Mosby Co, 1948.
- 1978-79 Information Kit. St. Louis, American Optometric Association.
- Kamoroff B: *Small Time Operator: How to Start Your Own Small Business, Keep Your Books, Pay Your Taxes, and Stay Out of Trouble*. Bell Springs Publishing Co, distributed by Bookpeople. Berkeley, CA, 1977.
- Klaff M, Klaff D: *Adventures in Practice Management*. Bellaire, Texas, MK Enterprises.
- Kuhn BL: *Dear Judi: Letters to an Optometric Assistant*. New York, Advisory Enterprises, 1974.
- Lane MJ: *The Doctor's Lawyer, A Legal Handbook for Doctors*. Springfield, IL, Charles C. Thomas Co, 1974.
- Levene JR: *Clinical Refraction and Visual Science*. London, Butterworth Publishers, 1977.
- Levoy RP: *The \$100,000 Practice and How to Build It*. Englewood Cliffs, NJ, Prentice Hall, 1966.
- Levoy RP: *The Successful Professional Practice*. Englewood Cliffs, NJ, Prentice Hall, 1970.
- Licensed Optometrists in the United States by State, 1972-1973*, 2 vols. U S DHEW, Bureau of Health Resources Development, Division of Manpower Intelligence, 1974.
- Manual on Optometry and HMO's*. St. Louis, American Optometric Association, April 1978.
- Milkie GM (ed): *Office Policy/Procedure Manual for Paraoptometric Personnel*. St. Louis, American Optometric Association, 1974.
- Milkie GM: *Partnerships and Professional Corporations*. St. Louis, American Optometric Association, 1972.
- Milkie G, Miller S (eds): *Current Optometric Information and Terminology*, ed 2. St. Louis, American Optometric Association, 1975.
- Opinion Poll—Economic Survey. St. Louis, American Optometric Association, 1978 (typewritten).
- Optometry Today: The Vision Care Profession*. St. Louis, American Optometric Association, 1977.
- Professional Budget Plan literature. Available from Professional Budget Plan, Madison, Wisconsin.
- Public Health Optometry: Proceedings and Recommendations of the Public Health Information Forum*. Washington, DC, American Optometric Association, 1978.
- Scope and Function—Division Guidelines*. St. Louis, American Optometric Association, July 1979.
- Shore, Shore: *How to Hire for the Professional Office*. Philadelphia, Lippincott, 1967.
- Simmons E: *Synopsis of Jurisprudence for Optometrists*. Minneapolis, Burgess Publishing Co, 1963.
- Speaker's Service Guidebook*. St. Louis, American Optometric Association, 1978.
- Stein HA, Slatt BJ: *The Ophthalmic Assistant: Fundamentals and Clinical Practice*. St. Louis, CV Mosby Co, 1976.
- Tax Guide for Small Business*. U S Dept of Treasury, Internal Revenue Service, Pub No 334.
- Your Federal Income Tax Return*. U S Dept of Treasury, Internal Revenue Service, Pub No 17.
- Your Vision. Your Life*. St. Louis, American Optometric Association, 1978. 16 mm film, 25 min.

"Hold Fast to Dreams . . ."

Photography by Jack D. Goldberg



JOE: Dr. Goldberg, what are you presently doing with your doctor of optometry degree?

GOLDBERG: I'm presently working in two solo private practices of my own, half a week in each practice. One is in the community of McLean, Virginia, and the other one is in the very rural community of Middleburg, Virginia. Both practices are set up as general or family practice, and they're strictly on an appointment basis. I also work as an associate in another established practice to supplement the income of both solo practices.

JOE: How long have your practices been established?

GOLDBERG: My McLean practice has been established for a year and a half, my Middleburg practice has just opened.

"Hold fast to dreams
For if dreams die
Life is a broken-winged bird
That cannot fly."

—Langston Hughes

(Dreams, in *The World Tomorrow*, 1921)

JOE: What else have you been doing since you graduated from optometry school?

GOLDBERG: When I first graduated, of course, I had to get my licenses in the states in which I wanted to practice. I chose the Washington, D.C., area, and when I obtained my license in the District of Columbia, I applied for a position as an associate. At the time there was not a great deal of response to that, so I began working as an optician until I obtained licenses in Maryland and Virginia. When I obtained my Virginia license I began establishing my practice in McLean almost immediately. During the time that practice was developing, I worked as an employee of the American Optometric Association Washington Office staff, doing work on grants and eventually moving into a consultant position which was handled from my office. After that, I started working as an associate in another practice in Virginia. I'm still working in that position.

Editor's note: Throughout the four years of professional education in optometry, students undoubtedly are shaping impressions of how they want to practice. Sometimes these ideas may be formulated before they enter school; sometimes they may even be the reasons for entering school. Like the poem "Dreams," we must retain our idealistic goals to strive for what seems the unattainable and eventually attain that which we can live with.

This story was originally going to be about one young O.D.'s plight to estab-

lish a practice in a large metropolitan upper middle class suburb. Dr. Fred Goldberg's goal was to establish a practice as a family doctor of optometry in McLean, Virginia. In retrospect, however, it is also an account of a very personal learning experience. This type of practice setting may not be the easiest way to begin a professional career in optometry. But, the end product, which has been for many years the foundation of the profession, is that he achieved something which is solely his own; he has joined the ranks of the professionals.

JOE: How long has it been since you graduated?

GOLDBERG: Two and a half years.

JOE: Are you satisfied with your present practice situation?

GOLDBERG: I'm satisfied now that my practices are viable and that they are growing at the rate they should be. However, I wasn't always so optimistic. At the start, I had anticipated a much quicker growth. My McLean practice was set up originally so that I could get referrals from opticians, and I anticipated a larger source for referrals than just word-of-mouth. That seemed to work out fine until I started realizing that the opticians in the area were so oriented toward ophthalmology. Those I dealt with didn't understand how to communicate with optometrists. They were very skeptical as to the optometrist's ability to provide a good prescription, and their biases were too strong. The referrals lasted for a short time, but mostly they had to maintain their rapport with the ophthalmologist they had worked with all along.

After I started dispensing in my McLean practice, it didn't affect the amount of referrals I received from opticians. As long as I referred the patients back, they were satisfied. They weren't going to refer any more patients because I was or wasn't dispensing glasses. That made a big difference in my attitude towards practice.

If you are going to set up private practice, it has to be a totally independent enterprise. As a professional you must be in direct control of the care of your patient. You should reserve the option to perform full-range vision care, including dispensing, in your practice. Some opticians in Virginia felt that certain examination procedures, such as follow-up contact lens examinations, were within their realm. If you allowed one to "get a foot in," they wanted to take control of your practice, your patients and eventually your professional responsibilities. When one put his foot in, I closed the door on his referrals. It may have cost me some patients, but the independence and control of patient care was worth it.

JOE: What change did you decide to make in your practice situation?

GOLDBERG: There is a time when you have to assess how your practice is doing, and whether it's holding its own. At a certain point, I realized that my practice was not paying for itself. I took a position as an associate, which provided me with enough income to pay



"There is a time when you have to assess how your practice is doing and whether it's holding its own."

for the cost of the practice, plus a little bit more. Once my practice is paying for itself and giving me a substantial income, I won't do that any more.

I'm concerned that new graduates realize before they open an office most of the money they make is going to go for paying the expenses of that office, the rent, the equipment, the utilities and personnel which are the biggest expenses. If they don't make enough supplemental income, they will not have enough revenue to keep that practice going.

I evaluated my practice in terms of how much I had to make as an associate to meet the expenses of my McLean office, on top of what the office brought in. I found that about half my week was spent as an associate. Now that I've opened my Middleburg office, I expect that I will make more because Middleburg is a completely different situation as far as patient population is concerned. In McLean, I am not well known, but in Middleburg I'm very well known, and that will help bring patients to the office.

JOE: How did you choose your practice location?

GOLDBERG: When I moved to the D.C. area, I saw that the population in Fairfax County was 500,000 and the ratio of optometrists to population was well above 10,000 to 1. However, the county is very large, and that 10,000 is spread out. All the doctors, especially the eye care personnel, including ophthalmologists, are concentrated mostly in McLean. I opened up, of course, where all the other concentration was. This created a situation where I was in direct competition with a lot of other doctors in the area. However, I knew that the population in McLean is very transient, and a new doctor would build up a population of patients very quickly, which would last for a number of years and then change again.

The population of Fairfax County was also projected to increase to 750,000 within five years of the time I opened my practice. All these new people would be looking for eye care professionals. As a young doctor, I had a unique opportunity to be in contact with this young population who was looking for somebody abreast of the latest developments in the eye care field. I was lucky in that respect. This premise has now started to prove correct because my practice is showing the proper income and patient flow that I had anticipated.

Now that I'm getting well into my second year, I'm starting to see my first-year patients returning. However, they do not all return every year, as one would expect. You need a large patient population, probably on the order of 10,000 per doctor or more to get you through the first few years.

JOE: What kind of problems did you experience when you were first setting up your practice?

GOLDBERG: First of all, I had to obtain a loan for the office. When I graduated from optometry school, I had the impression that banks would be very anxious to give new doctors a personal loan. Well, actually, that's not the case. You can't just walk into a bank and say, "I'm a doctor now. I'm worth a lot of money potentially, and I want a loan." You can get an endorsed, unsecured loan. Endorsement means that you can get someone who has equity, as much as what you're asking for or more, to co-sign for your loan, but you need a co-signer. If you don't have someone, either parents or friends who has equity, then you won't get a loan. Unsecured means that the bank doesn't hold any physical security to back that

loan, they're using your signature and somebody else's as security. That's the only value of your degree in getting a loan.

On the other hand, when I applied for the loan on my Middleburg practice, I had a one year old practice in McLean to back my signature.

The second problem was not really being aware of how many business applications, licenses, prerequisite forms, and other legal matters you have to know in order to open a practice, although in school you are told that these things exist. Specifically, you have to start investigating these things. It's important to find a good accountant and business manager who handles small businesses to tell you exactly where to go and what to get, such as an occupancy license, etc. There is a separate professional license required for each county that you practice in. You need zoning clearance also; you may not be zoned to practice in a certain area. All of these things are prerequisites for owning and starting a practice, and a lot of it is high level business management.

You also have to decide how you are going to set up your office, as far as physical layout is concerned, and how much personnel you are going to need, or whether you are going to start with personnel right away. If you're not there all the time, you have to find some way of making yourself appear to be there. Usually, an answering service which will book appointments is helpful. You also have to find out exactly how to make yourself known in the community. If you are going to do it on a referral basis, check out the tenor of the doctors in the area.

As far as equipment is concerned, I did buy brand new equipment. I realize now that the expense of that equipment was probably two to three times what I should have invested in the beginning. However, if a doctor starts out with old equipment, the tendency is to stay with that equipment for many more years than is necessary, and the cost of new equipment goes up so quickly that the chances of buying new equipment get put off until, eventually, the cost is as much, or usually, many times more than you would have paid in the beginning.

I'm not saying that every new doctor should buy expensive equipment in the beginning. I didn't do that for my Middleburg office. But, when I see how efficiently my McLean office works with the new equipment and how much I enjoy spending time there, I know that al-

though my Middleburg practice is a nice practice, I will enjoy the McLean practice more because of the type of equipment I work with. I'm used to it. It's what I learned on in school, and that makes a big difference in how efficiently I practice. On the other hand, when you work with old equipment, you can work with anything.

JOE: How do you view the problems you experienced in setting up a practice now?

GOLDBERG: The first thing that I can say is, I've always been idealistic. I think a large percentage of students are. We can't lose track of that idealism, and I don't want to belittle it. But we also have to have a certain realistic point of reference. When I look at my practice, I have to say that I'm glad I did this and went through the hard times of setting up a practice while I am young, because I don't think I would have been able to do it if I had been a lot older. I think that it might have been better if I had purchased another doctor's practice. However, you have to be very careful when

"The first thing that I can say is, I've always been idealistic; I think a large percentage of students are. We can't lose track of that idealism . . ."



you purchase another practice that you're not just falling right back into the same problem of trying to build a new practice. That practice may be dying, and you may have to rebuild it just like you are building a new practice.

I do think that if I had investigated a little bit more, I probably would have waited at least until I had acquired enough personal income, and really anticipated the difficulties in setting up a practice, so that I could have paid for a portion of my business expenses and living expenses and gotten some of the basic things that I needed to live comfortably before starting to set up a practice.

You also have to realize what you want to do in your professional life. I wanted to own a family practice which was all mine and over which I would have complete control. No doctor was going to tell me how to manage my patients or schedule them, or how much time to spend with them. As a result, I now am in control of my situation.

The hardest part about it is, "Can you hear it?" and not everybody can. If you are at all unwilling to fight in a competitive business world, let someone else open up a practice for you. Don't be "penny-wise and pound-foolish." You'll end up providing less than optimum patient care. And get every bit of pre-practice exposure you can, so that by the time you open, you are well known and financially stable.

JOE: How do you feel your education could have prepared you better for this experience?

GOLDBERG: Well, first of all, education in optometry school is based upon every aspect of practice being available to you. When you go into a community, you have to realize that you are going in as a businessman, not just as an optometrist. There are other optometrists in the area who are not aware of how much a new optometrist knows about the profession and don't want that optometrist there. They feel that optometrist is a threat. Well, if that established optometrist had had some experience, either through reading about students or having an extern, then he would be better prepared to accept a new doctor into his community, be it as an associate or as another doctor in private practice. When you establish a practice, you have to sell yourself to the optometric community. That's something we are not totally prepared for. You are told how to go about assessing another doctor's practice and talking to him about it, but you are not

taught how to approach that doctor and say, "Hey, listen to me."

I think that as far as the educational system is concerned, it would be good if doctors utilized externs more. One of the important things for new graduates is to spend at least one or two or even three weeks in every facet of an established practice, talking with the doctor about how the office runs and how it really is being in competition with the commercial establishments, including advertising. These things affect doctors—the way they think and the way they react to you—and I don't think that we are totally prepared for that. You have to hear that doctor say to you, in a week of being with him, "Hey, you know, I'm just not getting any patients this week because they heard about this ad for some kind of special deal."

You can't run a practice on good will. You have to have people coming into your office. It would help if students could see how the changing times are affecting the private practitioner and be better prepared to cope with it when they go into practice.

JOE: Do you have any specific suggestions as to how the educational institutions can improve preparation in this area?

GOLDBERG: First of all, in discussing externships, I think that many doctors can benefit from having a young student doctor in their office helping out with examinations just the same way they use a technician. At the same time, the student can benefit from experience in the practice, learning how the business aspect runs. Not every practice may meet the criterion for a total teaching facility. However, the mere experience of working in an optometric office as a business, and not solely as clinical practice, is more important at some point, because you are starting to learn things that you cannot pick up from just turning dials and using lights.

Also, I think that, as I mentioned before, courses should include investigative knowledge of how consumer groups and consumer populations are reacting to the problem of recession and changes in our society. We live in a society where people are more educated and more inquisitive than ever before. The doctor is no longer on a pedestal in any field, and people are going to shop around. You have to realize that although a doctor builds up a reputation over a long period of time, people are going to go where they can get the most economical care. Although we can't teach how much to charge, a student



"I eventually want my patients to come to me because it is Dr. Goldberg—not 'Dr. Goldberg, Ltd.,' or some practice that is commercialized . . ."

has to be prepared to assess the tenor of the population. That may require courses in social psychology.

JOE: Dr. Goldberg, how do you feel about ethical practice now that you have experienced these difficulties?

GOLDBERG: Well, we no longer have a set of rules as to how flamboyant we can make ourselves in our profession. I'm referring to price advertising. We have lost a lot of our ability to control ethical practice, so we no longer look at our practices from the viewpoint of "Is this doctor making himself too known that he looks like he is groping for patients?" I think that ethical means to try, at some point, to make yourself look good so that people will come to you because you are special and very good. You don't have to solicit people to come to you. But you do have to bring people in so they can go out and tell other people that you're a very good doctor.

I feel that I will continue to remain ethical in the sense that I will practice for the betterment of the patient, and not for the betterment of my pocketbook.

throughout the rest of my practice career. But I may have to change how I get those patients to my office as far as how much media I use to make myself known.

When I refer to media, I'm talking about some kind of public information announcement which says that, "Most children do not express the way they see because they have not had experience seeing any better," or "A parent should bring a child in before they reach their primary school years so that they can have their vision examined and diagnosed before they are using their vision in great detail." These types of announcements bring exposure to you and they are not unethical—they are not advertising price, but they are, in a sense, promoting you as an individual providing a service.

JOE: Why do you feel you will continue in professional practice?

GOLDBERG: Somewhere in the years you practice—it may be five or ten or twenty years—every doctor reaches a level in the way in which he is viewed in the community, in the state, and in the country. I eventually want my patients to come to me because it is Dr. Goldberg, not "Dr. Goldberg, Ltd.," or some practice that is commercialized, but Dr. Goldberg—that doctor who is in control of my vision care, who provides care the way I as a patient like it.

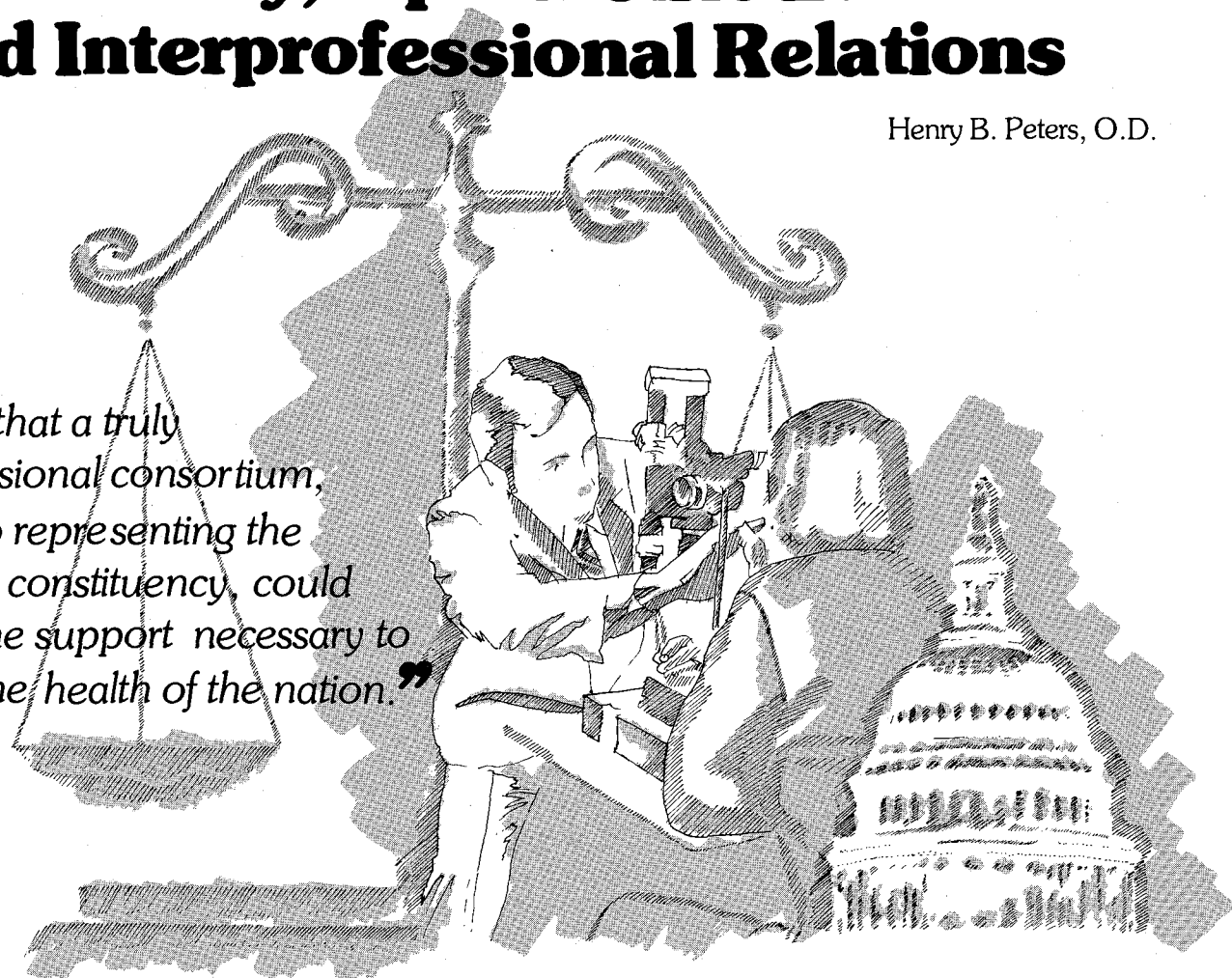
After a while, I may build a name as a specialist in a certain aspect of my field. It may be in how I practice optometry, it may be in how I fit contact lenses—who knows? But, somewhere along the line, I am going to have something that sets me aside as a Doctor of Optometry, and that will make my practice something that people will want to come to, whether they come five or fifty miles. That is where professional practice really stands out from something that is sold on the basis of a product. I am selling myself. I am selling my particular kind of care, and I want to be Dr. Goldberg, someone whom people will come to for proper vision care and will continue to return.

The road to professional practice is not an easy one—it may be beset with many difficulties. However, in addition to the improvement which may be needed in our practice management programs, a certain underlying desire and basic system of human values essential to accepting responsibility as a health professional is still a necessary ingredient in trying to achieve that which may constitute our "Dreams." □

Health Policy, Optometric Education and Interprofessional Relations

Henry B. Peters, O.D.

"I believe that a truly interprofessional consortium, devoted to representing the consumer constituency, could marshal the support necessary to improve the health of the nation."



This paper was developed for the Interprofessional Forum sponsored by the American Optometric Association, Anaheim, California, June 19, 1979.

I have been asked to explore the subject of health policy and its influence on patients and providers—all in the context of the mutual professional concerns of an interprofessional audience. There is a vast literature related to this subject and many conferences have been held to address the various issues involved. As immediate past President of the National Health Council and Dean of the School of Optometry/The Medical Center, University of Alabama in Birmingham, I will attempt to share with you some of my perceptions, gleaned from my experiences through the programs of the National Health Council, and to describe the changes that optometric education has made,

and must continue to make, to meet the challenges of changing health policy.

The National Health Council has held three national forums on health policy and health regulation. It is clear from these discussions of national leaders that there is not a single comprehensive statement of health policy for the nation—in spite of the efforts of President Carter and former Secretary Califano. P.L. 93-641 specifically calls for such a statement; but now, four years later, we still do not have such a statement. We may look with envy at our northern neighbor in this regard. But, if policy means legislative and governmental administrative actions, it is conspicuous that this nation has been spawning health policies at a proliferating and bewildering rate ever since World War II.

Regulatory Reform

There are currently some ninety federal agencies, issuing about 7,000 new rules and regulations each year. The Department of Health, Education and Welfare alone has amassed over 6,000

pages of existing regulations in the code of federal regulations through 300 legal authorities. No one pretends to know the true costs of compliance with all federal regulations but current estimates range from \$20 billion to \$130 billion a year. Regulatory reform has become a key issue in the Congress and is itself a major policy issue, with business and industry lining up on one side, and labor and public interest groups on the other. It is noteworthy that health groups have apparently not been involved to date. Perhaps they are frightened, since at the very time there is a major effort at deregulation in many sectors, health policy is looking at increasing regulation (cost-containment, home health care regulation, nursing homes, manpower, etc.).

But the federal government, in response to political pressures, continues to expand its involvement and expenditures in the health care field. These gigantic expenditures for facilities, services, manpower and research approach \$150 billion per year, and an in-

Henry B. Peters, O.D., is Dean of the School of Optometry/The Medical Center at the University of Alabama in Birmingham.

creasing share of the gross national product (now almost 9 percent). Such expenditures represent choices: education, transportation, defense, energy, welfare, housing and a host of other competing priorities.

Now, there is no doubt that health services have been made more accessible to more people, quality has been improved and much new knowledge has been developed through these programs. It is true, too, that many new facilities have been provided for both services and education. The professionals themselves have benefitted greatly in terms of personal income and their social position in society.

But it is equally true that there are still great gaps in the availability of services, that there are substantial segments of our society that are underserved for economic, social or geographic reasons. And little attention has been paid to the social and behavioral factors, the non-medical factors, relating to health.

All of this achievement, and it is substantial, has been at great cost; and, in a time of financial restraint, the policy makers are asking if it is too much. Clearly there have been abuses and these are held up to challenge further investment in health.

The bottom line for us is how to achieve public accountability for the huge federal expenditures for health. Each regulation attempts to spell out the implementation of a law, created in the political process of resolving the conflicting interests of special interest groups. It is no wonder that each regulation, even the legislation, may be subject to different interpretations at the administrative level. Almost surely each restriction imposed on one activity provides a new opportunity for exploitation by another. In fact the whole process has spawned a new industry of consulting groups in Washington familiarly known as the "beltway bandits."

The health care providers have taken a particularly narrow view of this process, one characterized by self-interest. This has led to particularly debilitating interprofessional conflicts before the Congress and before the regulatory hearings. This has resulted too in the development of regulations that are specifically designed in subtle ways to benefit small segments of society. Regulation is frequently coopted by the most powerful. In health care usually the strongest and best organized are the providers. The public is beginning to recognize this and the result is increasingly restrictive regulation.

Health Policy Issues

What then are the major health policy issues? And which of those are most important to us?

All would agree that the major one of current interest is cost containment. The rapid inflation of health care costs, the pressure of other national priorities (i.e., energy) have made this a highly visible national issue. Most other issues, once viewed as ends in themselves, are now related to cost containment. Access to health services of high quality for all citizens has been a continuing concern that has led to financing programs (Medicare and Medicaid), facilities programs (Hill-Burton), quality assurance programs (PSRO), service programs (emergency medical services, community health centers, rural health initiatives) and system restructuring (health maintenance organizations). The perceived problems of specialty and geographic maldistribution have resulted in changes in emphasis in manpower programs, while the public concern for costs have led to charges of medical monopoly and the efforts of the Federal Trade Commission to treat health care as any other business enterprise.

There is an increasing cognizance that a society that concentrates its resources on the sick will never be a healthy society. The National Health Council, in partnership with the National Center for Health Education and the U.S. (DHEW) Office of Health Information and Health Promotion, is currently involved in a national program of forums related to health education, health promotion, risk-reduction and personal responsibility for health and wellness. It is remarkable that there is relatively little involvement in this major national movement by the traditional health care providers.

But how has optometric education responded to these many challenges? In the last decade, while sharing in the federal largesse for facilities, special projects and manpower development, optometric education has moved steadily toward a position of a public health oriented profession in a family of health caring professions. All schools of optometry have increased their basic health science preparation toward that of medicine and dentistry; all have increased significantly their curriculum content in public health and epidemiology; all have increased their content in the behavioral and social science aspects of health care.

Equally important, they have in-

creased their curriculum content to allow their graduates to discharge their public responsibilities as primary providers of eye and health care. They have expanded their service programs with clinics providing care to underserved populations in inner cities, rural outreach and the institutionalized. They have developed successful interprofessional educational and clinical programs. They have developed a rationalized manpower program including optometric technicians and residency programs. Through basic vision science research, clinical research and research on the delivery system they have contributed new knowledge of great value to the public.

The Need for Interprofessional Concern

What then can I contribute to this gathering? First I would like to impress everyone with the need for shifting our priorities from self-interest to one of concern for our constituency—our patients or potential patients (those in need of our services). This means we must rationalize our differences in the interests of this constituency, we must act together in the interests of this constituency and we must represent this constituency to the decision-makers and resource allocators (our elected officials). We must become their advocates because only by that means will we be able to preserve our capacity to serve them.

We know a good deal about these problems. We even know some of the directions toward potential solutions. We are familiar with the machinery of government and the techniques of influence. We are generally more aware of the social forces and the potential options for change.

I believe that a truly interprofessional consortium, devoted to representing the consumer constituency, could marshal the support necessary to improve the health of the nation. I, for one, stand ready, even eager, to participate in the effort.

It would require heightened sensitivity to the needs of this constituency; developing plans to provide for the underserved; understanding the social and behavioral/cultural problems involved; and, putting self-interest aside, creating innovative ways of serving all the people. This is worthy of a major effort by each profession and, more particularly, all of us together. □

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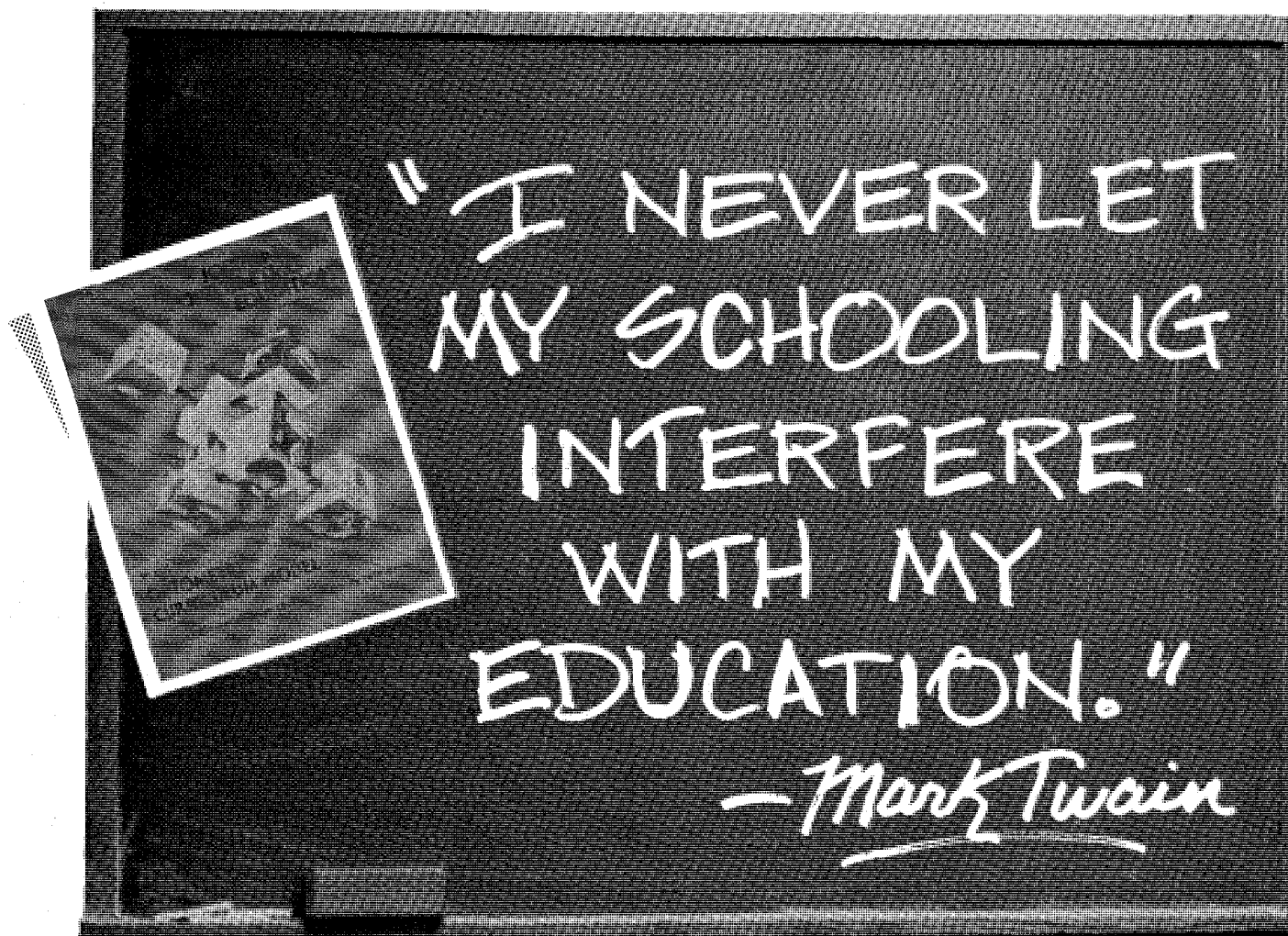
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