

Association of Schools and Colleges of Optometry

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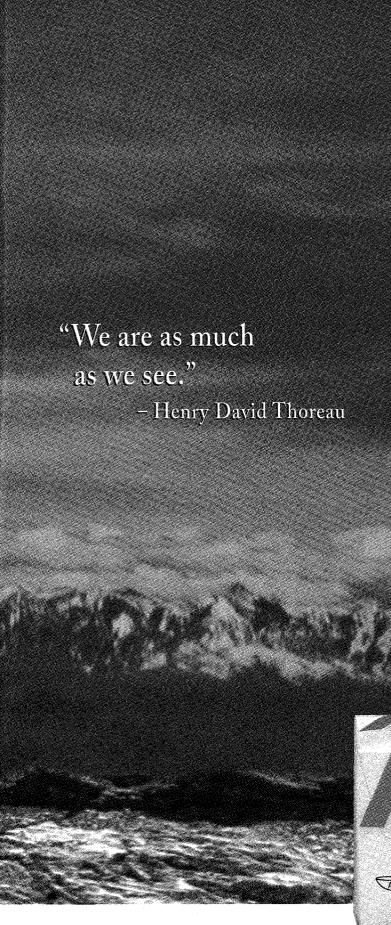


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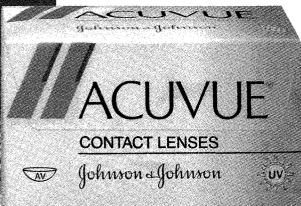
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EDITORIAL

Tenure?

he paper featured in this issue by David Lampariello of The New England College of Optometry describes the experiences of that college while revisiting its tenure process. As reflected in this article, an important debate has been occurring within academic circles (especially in the clinical sciences) concerning the attainment of tenure for differing classifications of faculty activity.

How does one deal fairly in administering tenure when evaluating the variety of responsibilities typified by clinical instruction and care, didactic teaching and research? The NEWENCO process presents a cogent approach to bringing tenure to a more current footing. It strives to recognize the continuing value of faculty members' contributions according to their specific job requirements.

The concern about the application of tenure guidelines across varied faculty responsibilities is not restricted to NEWENCO or to Optometry as evidenced by similar experiences at other institutions, including that described by NEWENCO's consultants from Harvard. This paper is, therefore, important reading for all faculty and deans considering the equitable application of tenure to their clinical and didactic faculty.

From a societal perspective, tenure has come under significant scrutiny. At one extreme, there is the perception that tenure is an antiquated system that must be overturned. Some ask what is the fairness of a particular group of workers having a guarantee of lifetime employment when others can be summarily terminated? What is the value of tenure to society? Although the exigencies of austerity

within public and private educational budgets have given these arguments new life, such concerns are not new.

Yet, with all these questions surfacing over the long history of academia, tenure has endured. One must look at the foundational principle of "academic freedom" to understand the strength and resiliency of tenure. Tenure is meant to protect the academic from the pressures of political forces which are always present and which may prevent the free seeking of truth, i.e., the freedom of faculty to explore, discover and explain the facts of their academic domain and perform all other related duties, without fear of censure, reprisal or unwarranted dismissal.

One common misconception about tenure is that it exists only for the benefit of the faculty member, a guaranteed employment program as it were. Certainly the security afforded by tenure to qualified faculty is an important factor, enabling them to stay within academia rather than moving outside to industry or private practice. However, when we explore its foundations, we find that the principal rationale for tenure is to serve the common good. The American Association of University Professors (AAUP) formulated in 1940 a statement on academic freedom and tenure that describes the classic case for tenure as:

"Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or institution as a whole. The common good depends upon the free search for truth and its free exposition."

In the sciences, the process of providing proof of faculty qualifica-

tion for tenure has often been characterized by rather narrow definitions of this search for truth. The process has consisted primarily of evidence of competence in basic research, usually federally funded, highlighted by excellent publication listings in peer-reviewed journals. However, the common good is obviously well served through the application of the didactic knowledge and clinical skills to the training of future health care practitioners. Furthermore, there is an equal search for truth when the academic seeks to establish, exercise and evaluate those teaching methods most appropriate to the task of transferring disciplinary information to the next generation of students or to the training of health care providers. This is particularly so in the current age of computerization and innovative teaching techniques driven by technology.

Because optometric educators are training clinicians who must adopt a professional commitment to maintaining their own future knowledge, the faculty enterprise in clinical education deserves recognition in requiring excellent role modeling in day-to-day scholarship as well as in the execution of state-of-the-art patient care responsibilities.

Tenure, therefore, encourages an academic environment whereby we in Optometry can apply the highest levels of scientific and clinical rigor and independence of thought not only to the discovery and verification of concepts but also in the teaching and practice of our rapidly evolving profession.

Julie mSacha II

Felix M. Barker, II, O.D., M.S. Editor

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Looking Toward the Future...

VA Optometry

With over 175 optometrists working in 151 medical facilities serving our Nation's 26 million veterans, VA offers more opportunities than any other health care system. Because of VA's affiliations with many schools and colleges of optometry, teaching and research opportunities are currently available in addition to direct patient care.

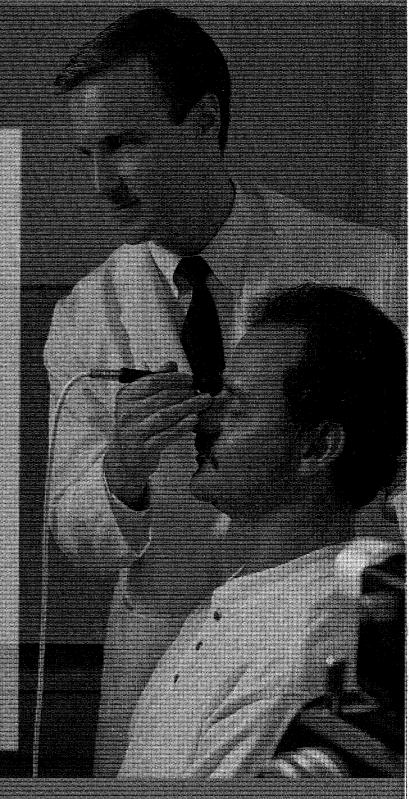
VA offers an outstanding opportunity for recent optometry graduates in our residency training program, that includes areas such as hospital based, rehabilitative, genetric, and primary care optometry. After one year, a VA residency trained optometrist enters the workforce confident, capable, and qualified to fulfill virtually any professional opportunity flasionary programs run for one year from July 1 to June 30.

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Keeping an Eye On Our Past.

OPHTHALMIC

INDUSTRY NEWS

Vistakon Sponsors APME Conference

Realizing that innovation is the key to ensuring strong professional growth in the field of vision care, Vistakon, a division of Johnson & Johnson Vision Products Inc., recently sponsored the Association of Practice Management Educators' (APME) ninth annual conference held in Ponte Vedra, Florida.

The theme, Improving Our Practice Management Curriculum, focused on the need for communication among ASCO, the American Optometric Association and companies such as Vistakon to improve the practice management skills of today's optometric students. Dr. George Mertz, director, academic and clinical affairs, and Dr. Stan Yamane, vice president of professional affairs, Vistakon, accepted a plaque expressing the appreciation of the APME for the efforts of Vistakon's Professional Affairs Division to improve optometry.

VICA Looks To Vision Expo/West

With the recent conclusion of the most successful International Vision Expo show ever held on the East Coast, excitement is building for the upcoming "New" International Vision Expo/West, set to make its debut in Los Angeles this fall, according to Bill Wilson, Vision Council of America's director of public relations.

For the first time in its history, International Vision Expo's West Coast show will be held at the newly expanded Los Angeles Convention Center. More than 400 exhibitors and 12,000 attendees from around the world are expected to be on hand when the show makes its move to the City of Angels. The exposition will take

place September 25 through 27. The education conference will run from September 24 through 27.

Polymer Introduces New Lens Material

Polymer Technology has introduced BOSTON EO—a new high Dk lens material for RGP patients. BOSTON EO is the first RGP lens material to combine high Dk and the proven performance of BOSTON ES with patented AER-COR architecture.

The AERCOR architecture features a patented oxygen permeable backbone and patented oxygen permeable crosslinkers. This allows more oxygen to pass through the lens material, while providing flexure resistance, durability, wettability and comfort comparable to the industry leader, BOSTON ES. The increased oxygen permeability (Dk) of BOSTON EO provides contact lens wearers with excellent oxygen transmission and optimal ocular health, according to Dr. Gary Orsborn, Bausch & Lomb.

Marchon Announces Calvin Klein "Classic Editions"

Drawing on the elegant simplicity of America's modernist tradition in design, Calvin Klein has created Classic Editions. Each pair is presented in a vintage-like, distressed brown case designed in harmony with the antique appeal of the Classic Editions eyewear. The Classic Editions line was inspired by Calvin Klein's personal collection of antique eyewear. Purity in design and technical simplicity inspire a collection that recreates the ultralight, ultra-thin appeal of vintage American eyeglasses from the 1930's and 1940's. Four styles are available for women or men. Calvin Klein Eyewear is distributed exclusively by Marchon Eyewear, Inc.

Wesley Jessen Names Distributor In India

Wesley Jessen Corp. has named Silklens Private Ltd., of Bangalore, India, to be its national distributor in India. Wesley Jessen, with head-quarters in Des Plaines, IL, is the world's fourth largest contact lens manufacturer. In addition to being a distributor, Silklens is also a manufacturer of RGP and conventional soft contact lenses.

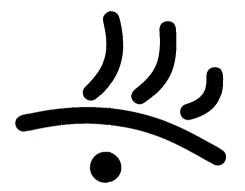
Wesley Jessen anticipates expanded market penetration of its specialty contact lenses in India with the leadership of Silklens, said Kevin Ryan, Wesley Jessen's president and chief executive officer.

CIBA Vision Introduces FOCUS® Toric Visitint®

Ciba Vision announced that its FOCUS® Toric contact lenses for astigmatism will now be available with the company's patented Visitint® handling tint. FOCUS Toric Visitint lenses offer astigmats all the benefits of frequent replacement lenses at prices competitive with traditional toric lenses.

"It was only natural that we added Visitint to FOCUS Toric so that people with astigmatism can enjoy the same convenience as FOCUS spherical contact lens wearers," said Steven T. Schuster, president of CIBA Vision North America. "CIBA Vision is committed to constantly improving existing products and developing new products to meet or exceed consumer and professional demand." CIBA Vision is the eye care unit of Novartis, AG. Headquartered in Basel, Switzerland, Novartis employs about 87,000 people and operates in more than 100 countries around the world.

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Optima®FW

SofLens66™

Renu®

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Boston[®]

Commencement 1998



Commencement 1998
Southern College of Optometry
Michael D. Jones, O.D.

Editor's Note: The following remarks are excerpted from a speech delivered by Dr. Michael Jones at the May 31, 1998 graduation ceremony at the Southern College of Optometry (SCO). Dr. Jones, a 1971 graduate of SCO, is the new executive director of the American Optometric Association (AOA). Dr. Jones has practiced optometry in Athens, TN, since 1971. Dr. Jones served as president of the AOA in 1997-1998. In future years, we hope to publish other commencement speeches that reflect the state-of-the-profession and the challenges facing new graduates.

find commencement ceremonies not only exciting, but also a bit curious. It seems that you always have a room full of people dressed in identical hats, identical gowns, seated in neat rows, listening to a speaker discussing the importance of individuality.

Having delivered several commencement addresses, I always wonder what those in attendance would find interesting or informative. I am convinced that a comment credited to George Elliot is always appropriate... "Blessed be the man, who having nothing to say, abstains from giving, in words, evidence of that fact."

For this occasion, since I am ending my presidency of the American Optometric Association and assuming the duties of executive director of the American Optometric Association, I thought I would share with you my expectations for the profession and what I feel will happen as we enter into the next millennium.

Prior to discussing what I feel is going to happen to Optometry, however, we must take a brief look at the changes that are taking place within the entire health care delivery system in this country.

The federal government, the insurance companies, and big business have made it clear that they will not continue to spend, as they have in the past, for health care costs. As Everett Dirksen said a number of years ago, "A million here and a million there. Before long it adds up to real money." Well, this is what these three giants have come to realize. I assure you that with their working together, change will occur. And change is occurring.

We now see what is commonly called "managed care." Managed care is not what it was once thought to be, and I am not sure that it will continue in its current form.

I say this for two very distinct reasons. First, numerous studies have shown that managed care is not saving nearly as much money as was once projected. And the "big three" are beginning to see this when they look at their bottom line. I feel that what has happened is that dollars have simply been shifted from hospitals and providers to administrators and consultants. But that is another story.

Secondly, many Americans have now received care under some form of managed care plan, and they are not happy. In fact, due to public outcry, there are currently numerous bills before the United States Congress that, if enacted, would dramatically affect managed care plans. And if passed, this legislation would make managed care plans even less cost effective than they are.

Yet, Optometry, like all health care providers, must learn to function in this new environment. The American Optometric Association is spending hundred of thousands of dollars and an enormous number of hours helping our membership deal with managed care.

We have published comprehensive manuals on managed care covering areas such as how to evaluate a plan, how to get on plan panels, how to negotiate contracts, what pitfalls to watch for. These manuals are available for members through our St. Louis office.

In addition, we have just published a manual explaining the importance of hospital privileges and how to acquire them. As a member of the medical staff of my local hospital, I know that this information will be critical to you in the future. Many of

(Continued on page 108)

(Continued from page 107)

the panels will be hospital based, and will require appointment to the hospital staff. This manual is also available to our members through our St. Louis office.

We are currently launching a major public relations program designed to reach the benefit managers and CEO's of managed care companies. It will also have a consumer public relations component. In both cases, we will educate the public and the purchasers of health care about the state of Optometry today. We are no longer simply providers of glasses. We are the primary care providers for eye and vision care.

That is not to say that providing the necessary ophthalmic appliances is not important. In our five-doctor practice — with all doctors being on the medical staff of the hospital; with three locations, one in the hospital; all absolutely state-of-the-art equipped; seeing many cases of ocular pathology; with numerous referrals from the rest of the medical staff of the hospital --- at the end of last year, 68% of our total practice income came from the sale of ophthalmic appliances. Please believe me when I say that the optical side of your practice situation will be critical to the financial success of your total practice situation. This has been true for years, and I think it will continue to be true.

If we are going to thrive in this new environment, we must be allowed to provide all the services that we are trained and licensed to provide, services that we are better at providing than any other provider group.

There are many other initiatives that the American Optometric Association is undertaking on behalf of our members — holding conferences around the country in order to educate state association leaders on managed care, conducting manpower studies, providing managed care courses at our major continuing education programs. All these services will be available to you, and I encourage you to take advantage of them.

What Optometry has accomplished over the past twenty-five years is unheralded in all of health care. Until 1971, no optometrist in this country could use any pharmaceutical agent for any purpose.

Today, all fifty states allow for the use of pharmaceuticals for the purpose of the treatment of ocular disease. And this now includes the District of Colombia. Granted, some states have greater authority than others. This might be something that you will want to investigate in choosing your practice location.

Twenty-five years ago, no optometrist had hospital privileges. That is becoming more common every day. Twenty-five years ago, we saw no optometrists working with ophthalmologists. Today, we are seeing more and more partnerships forming between OD's and MD's.

Optometry is on the brink of entering into the mainstream of the total health care delivery system. Again, we will see change.

We will see more employment opportunities for optometrists, not only by the optical chains, but by other optometrists, ophthalmologists, HMO's, hospitals, research institutions, and multi-disciplinary clinics.

This is not to say that private practice is dead. Private practices that are cost effective and efficient will flourish. I think we will see many optometric practices joining together and forming networks. Some of these networks will include ophthalmological offices as well. In fact, I am not so sure that this isn't the best plan for the future.

Unfortunately, the day of simply hanging out the shingle and waiting on virtually guaranteed success is gone. There is no doubt about that. That luxury is gone for every provider group. Yet, taking everything into consideration, our future is very, very bright as compared to any other health care provider group.

I believe that for a number of reasons. We match perfectly the picture of the ideal health care provider. We are relatively inexpensive to train. We have superb geographical distribution. We have a broad scope of practice, allowing us to fill the role of the primary eye/vision care provider. We are cost effective, and our track record is excellent.

Yet, we do face one major problem. We are the best-kept secret in all of health care. The purchasers of health care don't know what we have to offer. They have no idea of the role that we can and are willing to accept. That then becomes our greatest challenge in the coming millennium. We must effectively tell our story.

This is no easy task. It will take a unified effort by all of Optometry. It will be very expensive, so we must combine and effectively utilize our financial resources. This can only be done by all of us joining and supporting our state and national organizations. This again is an absolute must.

My greatest concern for our future is a societal change that we are seeing in Optometry, in our communities, and even in our churches. Your generation is much more demanding than any before. You say, if you don't show me direct benefits of what you are doing, I will not join. This is different from previous generations and will pose a new challenge for professional leaders.

My predecessors and my generation joined and became involved simply because that is what one did. It was not a question or a point of debate. Due to that philosophical make up, we were united, and our success has been obvious.

However, my predecessors are retiring. My generation is rapidly becoming the smallest segment of the profession. Your generation is becoming the backbone of Optometry. If you don't join and support state and national efforts, we could very well loose the tremendous opportunity that we have before us. As the old saying goes, "We could be all dressed up with no place to go."

In a few moments, you officially will join the ranks of the finest health care profession on this earth. You will be in a position to help mankind like few other professions can. I truly do believe that next to life itself, God's most precious gift is sight. That gift will be firmly placed in your hands.

You are the brightest and besttrained optometrists to ever enter into this profession. Of that, there is no doubt. You have and will further develop the highest level of skills the profession has ever known. You have the opportunity before you to take the profession to levels not yet dreamed of and to provide care to others that has not even been conceived.

Yet, again I say, in order for this to happen, you will have to extend your focus beyond the four walls of your practice location. You will have to unite with ALL of your colleagues. You will have to pool your resources and combine your efforts.

I congratulate you on choosing this wonderful profession. It delights me to welcome you into Optometry. I wish you the very best and if I or the American Optometric Association can do anything for you at any time, please don't hesitate to contact us.

Thank you for your attention and may God bless you each and every one.

Faculty Promotion and Tenure Processes and Standards Revisited at The New England College of Optometry

David A. Lampariello, O.D.

Introduction

he New England College of Optometry has undergone a variety of changes over the past six years.

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Units 1997. The New England College of Denomiento dial cesta a traditionna promotron and reture sustem for equiporting in ally accomplishments in teaching schalasship and service in the area escendarship. a higher water had allowers been placed on territorial attended consider Capableria die o partient core provider, for those headly who speciel the majority of time experiences patients and clinical teaching was not emblicatily emalacated as a uniterial even March Albard - Arthur a traduction setting ultimately leads to a incher quality. et education. During 1996-1997, the Cotlege undertook to redefine the process of promotion wal tenare by recognizing the ifing excused an above control around of all two rally thereby combining facility in a dance a sarcideatha samear an ceatamatha eathraithm. indiction accelerate or elibrical. The rece imbile fins leen strongreit in such a ren. una, Ma Galego, carentare housede de c concess which will take into account origining dimeget untiltie our academic connucti

KEYWORDS: clinical excellence, divisional review, tenure, promotion

Organizational structure and administrative personnel have changed and approximately fifty percent of fulltime faculty are new within the past five years. The College has moved in new directions, embracing educational innovation, technological integration and an increased emphasis upon faculty research and scholarship. The advent of these changes motivated the faculty to reflect upon and question the currency of the present structure and process of faculty promotion and tenure. Most recently, cases of failure to attain tenure reflect an increasing disparity between historical expectations, and evolving standards and new directions of the criteria for promotion and tenure.

A CIBA Vision/ASCO TQE grant was written and obtained to aid in accomplishing our institutional need for developing a more practical and workable faculty appointment, promotion, and tenure structure and process.

The ultimate goal of the promotion and tenure reform process was to formatively develop faculty who excel in teaching, patient care, and scholarship, thereby improving the overall

Dr. Lampariello is associate professor of optometry at The New England College of Optometry and associate director of its external clinical programs.

quality of optometric education at the College. Through a formal process, the faculty and administration reviewed the current structure and process of promotion and tenure. Various committees were developed and external consultants from Harvard Medical School were hired, with money from the TQE grant, to help facilitate the process. From the onset, the process was committed to open dialogue and the evolution of higher standards, and respected the diverse interests of the faculty. Following two years of review, the College rewrote the policy documents for promotion and tenure and developed new promotion standards and criteria. The new process provides for divisional review to enhance a candidate's success for promotion. The faculty also endorsed 1) new criteria in the area of clinical practice, 2) an expanded view of scholarship and teaching, and 3) adopted guidelines for a more proactive process. This paper will discuss the process that the faculty at The New England College of Optometry undertook during the modification of the current promotion and tenure documents and present details of its final outcome. Critical issues including the role of formative review for faculty development, defining clinical scholarship, and the scholarship of teaching, basic science and clinical science research, and the concept of clinical excellence will be discussed.

Discussion

The College's faculty governance structure consists of a Faculty Chairperson, Faculty Secretary and six standing committees. The standing committees include the Executive, Faculty Affairs, Curriculum, Student Affairs, Admissions and Research. (Table 1) The Faculty Chairperson is elected annually by the faculty and is someone who presides at all of the faculty meetings. The Chair also represents the faculty by serving on the Board of Trustees. The College's faculty are structured into two divisions, the academic and clinical divisions. The division of academic affairs (under the Dean of Academic Affairs) includes the Department of Biosciences, the Department of Vision Science and Public Health, International Programs and Research. The division of clinical affairs (under the Dean of Clinical Affairs) includes the Department of Clinical Skills and Practice and the Department of External Clinical Programs and Residencies. Each department is directed by a department chair.

To catalyze institutional dialogue, in March of 1996, the Faculty Chair and the Deans of Clinical and Academic Affairs wrote a "Concept Paper," for discussion purposes, that-proposed the development of a new system of appointment, promotion and tenure at The New England College of Optometry. They stressed the principles of flexible standards, formative evaluation, institutional need, and continuing appointment. (Table 2)

The authors recommended that: 1) flexible, yet high standards in the areas of scholarship, service and teaching be maintained or enhanced, but be more reflective of the faculty member's career emphasis or area of expertise; 2) a formative evaluation system take place to augment and maximize faculty development (Standards would be applied through periodic divisional reviews, made up of faculty representatives from each division, and an annual review by the department chairs); 3) institutional need be better defined for both tenure and non-tenure track faculty appointments; and 4) continued appointment could be available to faculty who choose a non-tenured track, or for faculty who were unable to obtain the standards and requirements for promotion or tenure but who have a unique skill and/or expertise which adds to our educational program.

The "concept paper" was developed following the review of some of the concepts that Harvard Medical School utilized in recent changes to their appointment, promotion and tenure processes. Until 1980, Harvard Medical School had a clear distinction between tenured (academic full-time) and non-tenured (clinical full-time) faculty. In 1980, Harvard abolished the distinction between a non-tenured track and tenured track, instead creating full-time "laboratory investigator" and "clinical investigator" ladders. Unfortunately, the system did not recognize and reward those faculty who spent the majority of time in the hospitals involved in patient care and clinical teaching. Over the past decade, Harvard continued to make major changes in the structure and process of their promotion and tenure system. Throughout the 1980's Harvard began to realize that the clinicians were of great value to their insti-

Table 1 The New England College of Optometry's Faculty Governance Structure

Faculty Chairperson

Faculty Secretary

Standing Committees:

Excecutive

Faculty Affairs

Student Affairs

Admissions

Curriculum

Research

Table 2 Guiding Principles

1) Flexible Standards

Maintained in the areas of scholarship, service, and teaching for diverse faculty

2) Formative Evaluation

Implemented to augment and maximize faculty development

3) Institutional Need

For those faculty who choose a non-tenure track

4) Continuing Appointment

If need exists, for those faculty unable to meet the standards and requirements for promotion and tenure

tution and therefore needed to have the ability to advance through the system. They felt that the clinical faculty greatly enhanced the quality of medical education. Therefore, they began to develop ways to change their system of promotion, paying particular attention to the teaching and clinical contributions of faculty as opposed to the amount of research produced, as had always been looked at in the past. They developed, implemented and institutionalized a promotion ladder that recognized the teaching and scholarly contributions of their fulltime clinical faculty. Lovejoy and Clark observed that in 1991 75% of medical schools used non-tenure track appointments for teacher/clinicians. They believed this to be unacceptable for clinical faculty and set about to make changes in Harvard's

promotion and tenure process. In their article they described the appointment structure and process of a non-laboratory teacher/clinician, faculty with primary responsibilities in patient care and teaching. Requirements for promotion into this track emphasized teaching, clinical competence and leadership in patient care, curriculum development, service and scholarship. Scholarship in the Harvard model took into account case reports, literature reviews, textbooks, chapters and presentations at professional meetings. Notably the scholarship of education was strongly encouraged and accepted as evidence towards promotion and tenure.In 1989, Harvard implemented, and made its first appointment into, the Teacher-Clinician track. This track was designed to attract and reward

those faculty committed to the excellence of clinical teaching. In Harvard's model it was also stressed that the structure and process of a promotion and tenure system must support the institution and the faculty.

Process of Restructure

In April 1996, the process of revising The New England College of Optometry's current promotion and tenure processes and structure began when the faculty approved a motion to use the "concept paper" and the four guiding principles as a catalyst for debate.

Three task forces were established to begin reviewing and analyzing the effectiveness of the current structure, process and criteria for faculty promotion and tenure, and to begin generating ideas for future modifications. (Table 3)

The Academic Division Task Force was charged with reviewing and modifying the current promotion and tenure credentials and standards for the academicians. The Clinical Division Task Force was charged with reviewing and modifying the current

lege's annual Faculty Retreat, the task force chairpersons presented their reviews and recommended changes for the credentials and standards. The faculty discussed the different recommendations made by each task force.

Task Force Outcomes and Concerns

The academic, clinical and structure and process task forces made numerous recommendations which were discussed by the faculty at the retreat. Following is the list of significant outcomes of all combined:

- The standard of scholarship should place a greater emphasis on originality of knowledge and thought (original research) versus other forms of scholarship (scholarship of exposition)
- Teaching should continue to retain primacy in promotion and tenure decisions
- Applications for promotion and tenure should be reviewed only by faculty at a rank higher than that of the applicant
 - Add an additional area of evalu-

ment into non-tenure track of faculty turned down for promotion or tenure, or new faculty

- Eliminate the rank of instructor
- Institute a divisional review process
- Modify the current constituency of the promotion and tenure review committee

Following the conclusion of the faculty retreat, the clinical task force reconvened to further discuss the recommendation of adding the fourth area of evaluation in the area of "clinical excellence." The group was also charged with revisiting the pre-existing criteria for promotion and tenure. The group reorganized the criteria for promotion into the four areas for evaluation and expanded on or added to some of the present criteria.

Clinical excellence in patient care has historically been under-documented and/or taken for granted. Most recently, clinical faculty at several major medical schools throughout the country have modified promotion and tenure documents and are rewarding faculty for their accomplishments in the patient care and clinical teaching arena. The University of Virginia (UVA) School of Medicine felt it was essential to recognize, document and reward their clinical faculty.2 UVA looked at the value of clinical excellence in the academic setting and began setting new standards and criteria for evaluating promotion and tenure applications of their clinical faculty. Their system now relies on a detailed job description, constant evaluation, reassessment and mentoring. In July 1993 UVA School of Medicine created a tenure track for clinical faculty.

Two outside consultants were also hired to meet with the clinical task force, (and later with the structure and process task force) one being Dr. Mary Clark, assistant dean of faculty at Harvard Medical School, and Dr. Richard Bringhurst, a clinical faculty member at Harvard Medical School and The New England College of Optometry. Both played significant roles in the re-developing of Harvard's appointment, promotion and tenure policies. The goal was to discuss differences in standards and criteria for clinical versus academic faculty in the promotion and tenure process.

In late 1996, a structure and process committee, consisting of three clinical faculty and three academicians (all of

Table 3 Initial Task Forces

Reviewed current academic promotion and tenure credentials and standards

2) Clinical Division Task Force Reviewed the current clinical promotion and tenure credentials and standards

3) Structure and Process Task Force
Evaluated the current structure and process
for promotion and tenure.Began making
recommendations for restructure

promotion and tenure credentials and standards for the clinicians. The Structure and Process Task Force was charged with re-evaluating the current structure and process for promotion and tenure.

The Academic task force was made up of four academicians and one clinician, the Clinical task force was made of four clinicians and one academician and the Structure and Process task force was made up of 5 members of the faculty with an elected chairperson and an even distribution of clinical and academic faculty.

On July 26, 1996, during the Col-

ation for the clinical faculty, "Clinical Excellence," to assess and evaluate clinical faculty primarily involved with patient care and clinical teaching

- Broaden the definition and examples of scholarship for the clinical track
- Faculty members' achievements for promotion and tenure should be weighed in relationship to their workplan and assignments
- Establish a non-tenured track after proper faculty evaluation and review
- Adopt the concept of "institutional need" as it pertains to place-

whom sat on the previously stated committees), reconvened. The committee was charged with reviewing all the documents written to date and making final recommendations for the promotion and tenure process and standards:

- 1. The original "Concept Paper" on promotion and tenure
- 2. The Academic Standards Report
- 3. The Clinical Standards Report
- 4. The Structure and Process Report
- 5. Final Clinical Task Force Report

Following three months of deliberation, the committee unanimously agreed upon and highlighted the following recommendations which were brought forth to the faculty at a special faculty meeting in mid-1997. Further discussion occurred with minor modification of the document. The following list of items was finally agreed upon by the majority of the faculty and voted into action during the 1997 annual faculty retreat. (The tenure document will be reviewed and voted upon by the board of Trustees.) The key concepts are divided into structure (various committee constituency, tenure versus nontenure appointments, and faculty rank), process (divisional review, proactive approach, time line) and standards for promotion and tenure.

I) The Structure

The **constituency** of the divisional review committee would consist of the department chair of the individual applying for promotion or tenure and three faculty from the candidate's division. The department chair would be responsible for selecting people who are at the rank or above the rank of the candidate. The appropriate dean would carry the responsibility of informing the department chairs of the faculty who should be reviewed each year.

The Faculty Affairs Committee would be comprised of six members, each to serve a three-year term. The committee would consist of at least two tenured faculty from the clinical and academic division. A third atlarge full or part-time faculty member from each division would also be elected. All members would be at the rank or above the rank of the candidate being evaluated. When reviewing tenure applications all members of the committee must be tenured.

A non-tenured track appointment would be instituted and utilized only by those faculty chosen by the department chair and dean to fill a unique or temporary institutional need. The appointment could be written as a one or two year renewable contract. Individuals eligible to be placed into this track would include:

a. Faculty previously denied promotion or tenure but who would fill a unique position and enhance the educational program

b. Tenured track faculty who would like the "one time only" chance to switch into the non-tenured track. They must obtain approval from the Department Chair and Dean and the decision must be made prior to the contract year in which the individual would apply for tenure.

c. New faculty hired by the College who have the option to apply for a tenure track appointment when one becomes available in their depart-

The faculty also voted to delete the rank of instructor because all new hires are required to meet the minimum credentials necessary to be appointed at the rank of assistant professor.

II) The Process

A divisional review committee would be instituted for all promotion and tenure decisions. The divisional review committee would be responsible for reviewing a candidate's file one to two years prior to application for promotion or tenure. The review would not replace the College's current annual review by the department chairs or required annual workplans. The divisional review committee would be a pro-active, formative and evaluative group. The committee would perform a candidate interview, review workplans, annual reviews, and the candidate's curriculum vitae. The Committee's final report would recommend a future course of action, intended to enhance the candidate's future promotion and/or tenure application. The written recommendations and all supporting documentation from the divisional review committee would be placed into the faculty member's file, with the faculty member's written permission. The applicant's file would be made available to the FAC at the time of formal application for promotion and/or tenure.

The modified time-line for promotion, tenure and divisional review would occur as follows:

a. An application for promotion from assistant professor to associate professor would be required by the

beginning of the faculty's fifth year. A divisional review would take place at the beginning of the third year.

b. An application for candidates applying for tenure would begin at the beginning of the eighth year. A divisional review would occur at the beginning of the seventh year.

c. An application for professor may be submitted by tenured faculty three years after attaining tenure. A divisional review would take place in the middle of the tenth year.

It was agreed that only the appropriate dean would be allowed to compress or modify this time-line.

Candidates would be required to submit to the FAC a self-evaluation and to ensure that their faculty file was complete by January 1st of the year being reviewed.

The candidate would also be required to submit a list of names for the FAC to solicit letters of recommendations. The FAC would also take a more pro-active stance in soliciting letters from people not necessarily on the candidate's list and the candidate would no longer request people to send letters to the FAC.

III) Standards and Criteria

The standards for promotion would be driven by influence and impact. An expanding level of inclusion, for each category being evaluated, must occur at the institutional, regional, national, and/or international levels. Promotion to a higher rank would be accompanied by an increasing field of influence and impact.

One must also demonstrate a growing recognition as an authoritative and influential person in the practice of optometry, the delivery of clinical care, the development of new knowledge, the synthesis and expression of what was previously known, or the methods of teaching of courses within the optometric curriculum.

The criteria in each area were rewritten to be broad in scope and to allow for reasonable assessment of faculty with diverse duties. The criteria are defined with suggested types of evidence to support each criterion. The faculty applicant would have the responsibility of providing evidence to support his/her role and contribution to the College and the profession. Intellectual distinction, originally, creativity, independence, and leadership capabilities should be accentuated.

A fourth category entitled "clinical practice" would be added to the promotion criteria for clinical faculty, along with modification of the promotion and tenure standards. The recommended areas for evaluation of a candidate applying for promotion or tenure would now include: teaching, service, scholarship, and clinical practice (applied to clinical faculty).

In the area of clinical practice, criteria may include:superior clinical skills and expertise and establishing a reputation as a superior clinician whose opinion is sought by colleagues and other health care providers. One should also show evidence of being a role model, clinical mentor and educator. Evidence of achievement as an established and innovative clinician who demonstrates a commitment to excellence in patient care should also be sought. Types of evidence to support this criterion might include: specialty or subspecialty board certification, letters of support from the candidate's peer group or from referring health care providers, evidence of a local or national reputation as an authority in the clinical field, support letters from students or patients, and the use of innovative approaches, technologies, instrumentation or systems of patient care.

Conclusion

The New England College of Optometry was faced with the arduous task of coming together and developing task forces, hiring outside consultants and seriously reviewing current documents pertaining to the standards and criteria for appointment, promotion and tenure. We were able to develop a system for promotion and tenure review which contains flexible standards and criteria that recognize diversity within the faculty. The new process includes a formative review to aid in the enhancement of faculty development. New definitions for clinical scholarship and clinical practice were also added for those faculty who spend most of their time in clinical practice and teaching. The new structure will now take into account the very diverse faculty at NEWENCO and allow individuals to develop and grow in the area of their expertise. Part of the mission at NEWENCO is

to attract and support a diverse faculty who excel at teaching and who are committed to the growth and development of students. In order to fulfill our mission, we must have faculty committed to a career in optometric education. The expectation of the College on a long-term basis is to yield a more stable, diverse and accomplished faculty.

Acknowledgments

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ASCO Meetings Calendar

- 1-4 Clinic Directors/Administrators SIG Sheraton Montreal, Montreal, CANADA
- 30 Executive Committee Dinner and Meeting (6:00 p.m. 9:00 p.m.) Holiday Inn Hotel and Conference Center Ferris State University, Big Rapids, Michigan
- 31 Board of Directors Meeting (8:00 a.m. 5:00 p.m.) Holiday Inn Hotel and Conference Center Ferris State University, Big Rapids, Michigan

For the most up-to-date information on ASCO meetings, contact ASCO's website at http://www.opted.org

A Survey of Indiana University School of Optometry Alumni

Theodore Grosvenor, O.D., Ph.D. David A. Goss, O.D., Ph.D.

ABSTRACT

In a survey of leathern Deticresity School of Chicaretry alterent, questionaire recipients wene unland conceptions besit agreement or disaggregoriant south existerments convernably the ILI entent transcriptions. The hydrest percentage of agreement was with the Stitement that "Ordernstrists about he very good at all separts of the and instantially including refractime, mick, binneralin menner mendemis, mentocit terre productive, emil divigironse and translations at erze dinames." IAVkon resignovera incre certsi dered acquirely for the 570 respondents in solo or ment (II) transcription for the life in (II) Will pendiks, the tentrologic of agreement with statismitalis concerning traditional egitemetric care ever higher for the OC produce responalembe, fruit refiere reggemeers de chahemends com corrung thatment of eachisemes and managesecond of referention surgery distincts there considered, percentages of significant were higher for the OD MD practice respondents. Alarmi were also asked to indicate the percontage of their income derived from each of normal pattern care sevences. Respondents in es de un miscontratorio de discontratorio de la companie de la companie de la companie de la companie de la co many of Parts of their throme chem traditional egatomertric cure was 795 from the treatment of epr dismes, while respondents in CD-MD proclies nevertal a more of 62% of their microne from traditional commetric care and 1896 from the decidenance of ever discusses. We conclude that this blood opportunity subselfs. should continue to be arros of emphasis or the iştiren in turkizuluk

KEY WORDS: Optometry curriculum, refraction, dispersing, treatment of eye diseases, vision throups, low vision care **Background**

s a result of the rapid changes taking place in the role and scope of our profession, optometric educators must assure that the education and training received by our students adequately prepares them for their careers after graduation. With this in mind, survey questionnaires were mailed to all Indiana University alumni who had received the O.D. degree since the inception of the program in 1953. The purpose of the survey was twofold: (1) to invite our graduates to express their agreement or disagreement with several statements concerning the Indiana University optometry curriculum; and (2) to ascertain what percentages of our graduates' incomes were derived from each of various patient care services.

Methods

Of the 1300 questionnaires that were mailed to alumni with known addresses, 780 replies were received,

Drs. Grosvenor and Goss are professors of optometry at Indiana University School of Optometry. Dr. Grosvenor is author of Primary Care Optometry, Anomalies of Refraction and Binocular Vision and co-author of Clinical Optics. Dr. Goss is author of Ocular Accommodation, Convergence and Fixation Disparity, a Manual of Clinical Analysis and co-author of Eye and Vision Conditions in the American Indian.

for a return rate of 60%. Of the 780 replies, 47 were received from optometrists who were retired or whose replies were incomplete, with the result that the total number of replies included in the analysis was 733. Although recipients were not asked to identify themselves, postmarks on the return envelopes revealed that replies were received from 44 states, the District of Columbia, and 3 provinces in Canada. Of the 733 optometrists in active practice, 597 were engaged in solo or joint OD practices and 136 were engaged in practices which included both ODs and MDs. As for communities in which respondents were located, OD practice respondents were evenly represented in cities and towns of all sizes, whereas 65% of OD-MD practice respondents were located in cities having populations of 100,000 or more.

In this article we report the respondents' opinions concerning the Indiana University Optometry curriculum. Responses concerning the percentages of income derived from the various patient care services were the subject of a recent article published in Optometric Economics, and will be presented here only in summary form.

Results

Questionnaire recipients were asked to express their agreement or disagreement with several statements having to do with areas of emphasis in the optometry curriculum. This question included 5 categories: strongly agree, agree, no opinion, disagree, strongly disagree. However for the sake of simplicity, the first and last two categories have been combined in the summary presented in Table 1.

Opinions Regarding the IU Optometry Curriculum

As shown in Table 1, the percentages of agreement were highest (98% for OD practice respondents and 93% for OD-MD practice respondents) for responses to the statement, Optometrists should be very good at all aspects of vision care including refraction, basic binocular vision problems, contact lens practice, and the diagnosis and treatment of ocular diseases. The lowest percentages of agreement (35% and 14%, respectively) were for the statement, Our curriculum should place more emphasis on ophthalmic dispensing.

The frequencies of agreement/disagreement for OD practice respon-

Table 1
Percentage of respondents indicating agreement, no opinion, or disagreement.

Statement	OD Practices No			OD-MD Practices No			
	Agree	Opinion	Disagree	Agree	Opinion	Disagree	
Optometrists should be very good at all aspects of eye and vision care, including refraction, basic binocular vision problems, contact lens practice and diagnosis and treatment of eye diseases.	98	1	1	93	1	6	
Our curriculum should place more emphasis on refractive problems.*	47	26	27	32	20	48	
Our curriculum should place more emphasis on basic binocular vision problems.*	52	29	19	39	22	39	
Our curriculum should place more emphasis on pediatric vision problems.	63	27	10	56	24	20	
Our curriculum should place more emphasis on contact lens practice.	66	23	11	57	24	19	
Our curriculum should place more emphasis on ophthalmic dispensing.**	35	29	36	14	21	65	
Our curriculum should place more emphasis on low vision care.	47	31	22	48	24	28	
Our curriculum should place more emphasis on treatment of ocular disease.	70	18	12	79	14	7	
Our curriculum should place more emphasis on the management of refractive surgery patients.	68	25	7	81	15	4	
*Significant difference in frequency of responses for OD vs OD-MD practices (p<0.05) **Significant difference in frequency of responses for OD vs OD MD practices (p<0.001)							

^{**}Significant difference in frequency of responses, for OD vs OD-MD practices (p<0.001)

dents vs OD-MD practice respondents were compared, using the chi square (χ^2) statistic. As indicated by the asterisks in Table 1, significant differences (p<0.05) were found for the statements, Our curriculum should place more emphasis on refractive problems, and Our curriculum should place more emphasis on basic binocular vision problems; and a significant difference (p<0.001) was found for the statement, Our curriculum should place more emphasis on ophthalmic dispensing. Some insight into these results can be gained from the comment of one OD practice respondent, that "Our instruction in dispensing was very good," and from our suspicion that ophthalmic dispensing may be of relatively little importance to those respondents engaged in OD-MD practices.

Because the Indiana Optometry Law, as amended in 1935, placed no

restrictions on the use of diagnostic or therapeutic pharmaceutical agents, optometrists in this state were in a favorable position to begin using diagnostic agents during the early 1970s and therapeutic agents later in the same decade. The IU optometry curriculum was expanded to place more emphasis on pharmacology and to include courses in ocular therapeutics during the 1970s, with the result that optometrists graduating from 1980 onwards had a very different background from those who graduated before 1970. For this reason, responses were analyzed separately for those alumni who graduated before 1970 and for those who graduated after 1979. The numbers of respondents who graduated between 1955 and 1969 and between 1980 and 1994 are shown in Table 2. As shown in this table, the proportions of graduates in OD-MD practices is much greater for the 1980-1994 gradutates (99 out of a total of 399) than for the 1955-1969 graduates (only 9 out of a total of 102). Using the chi square statistic, this difference was found to be statistically significant (p<0.01).

Tables 4 through 9 which are concerned with traditional optometric care — refractive problems, basic binocular vision problems, pediatric vision problems, contact lens practice, ophthalmic dispensing, and low vision care — show that for the OD practice graduates the percentages of agreement are higher for 1955-1969 graduates; but for the OD-MD practice graduates the percentages of agreement are higher for the 1955-1969 graduates in Tables 4 and 8, but lower in most of the other tables..

Tables 10 and 11 show that for treatment of eye diseases and management of

Table 2
Number of respondents who graduated between 1955 and 1969, and between 1980 and 1994.

	OD Practices	OD-MD Practices
Graduation between 1955 and 1969	93	9
Graduation between 1980 and 1994	300	99

Table 3

Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement: Optometrists should be very good at all aspects of eye and vision care including refraction, basic binocular vision problems, contact lens practice and diagnosis and treatment of eye diseases.

	OI	D Practice No	es	OD-	MD Prac No	tices
	Agree	Opinion	Disagree	Agree	Opinion	Disagree
Graduation between 1955 and 1969	99	1	0	100	0	0
Graduation between 1980 and 1994	99	<1	1	91	2	7

Table 4

Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:

Our curriculum should place more emphasis on refractive problems.

	C	DD Practic No	es	OD	-MD Prac No	ctices
	Agree	Opinion	Disagree	Agree	Opinion	Disagree
Graduation between 1955 and 1969	59	30	11	22	45	33
Graduation between 1980 and 199445	25	31	30	17	53	

Table 5

Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:

Our curriculum should place more emphasis on basic binocular vision problems.

	C	DD Practic No	es	OD	-MD Prac No	ctices
	Agree	Opinion	Disagree	Agree	Opinion	Disagree
Graduation between 1955 and 1969	60	35	5	33	45	22
Graduation between 1980 and 1994	52	25	23	37	28	45

Table 6
Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:
Our curriculum should place more emphasis on pediatric vision problems.

	_	DD Practic No Opinion	es Disagree	-	-MD Prac No Opinion	tices Disagree
Graduation between 1955 and 1969	72	20	8	45	55	0
Graduation between 1980 and 1994	64	25	11	57	20	23

Table 7
Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:

Our curriculum should place more emphasis on contact lens practice.

	C	DD Practic	es	OD	-MD Prac No	etices
Graduation between 1955 and 1969	Agree 73	Opinion 22	Disagree 5	Agree 33	Opinion 33	Disagree 33
Graduation between 1980 and 1994	68	15	17	59	20	21

Table 8
Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:
Our curriculum should place more emphasis on ophthalmic dispensing.

	Ol	D Practice No	es	OD	-MD Prac No	tices
	Agree	Opinion	Disagree	Agree	Opinion	Disagree
Graduation between 1955 and 1969	50	32	18	33	33	33
Graduation between 1980 and 1994	26	28	46	12	20	68

refractive surgery patients, the percentages of agreement—in addition to being very high—are essentially the same for the 1955-1969 graduates and for the 1980-1994 graduates. This is true for both the OD practice respondents and the OD-MD practice prespondents.

Unfortunately, because only 9 of the respondents graduating between 1955 and 1969 were in OD-MD practices, the chi square statistic could not be used to test the significance of the differences in the frequencies of the OD and OD-MD responses. Some respondents, particularly those who graduated in the early years of the OD program, commented that they were not familiar with what was currently taught, and thus were not able to complete this part of the survey. Others commented that they checked "no opinion" to indicate that they believed the school was placing the correct amount of emphasis on a given area. Therefore, it is possible that the "no opinion" category may have been interpreted as "not able to make a judgement," or as "the emphasis in the curriculum was

appropriate."

Respondents' Comments

Almost 200 of the 780 alumni who returned the questionnaire took advantage of an invitation to include comments. Many of the comments were wide-ranging and didn't mention specific areas of optometric care. However, of those respondents who addressed various areas of optometric care, the majority stressed the importance of traditional optometric areas including refraction, binocular vision, contact lenses, dispensing, and low

Table 9
Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:

Our curriculum should place more emphasis on low vision care.

		DD Practico No Opinion	es Disagree		·MD Pract No Opinion	tices Disagree	
Graduation between 1955 and 1969	59	34	7	67	22	11	
Graduation between 1980 and 1994	41	29	30	45	22	33	

Table 10
Comparison of responses of alumni who graduated between 1980 and 1994 to those who graduated between 1955 and 1969 to the statement:
Our curriculum should place more emphasis on treatment of ocular disease.

	0	DD Practice No	es	OD-	-MD Pract No	tices
	Agree	Opinion	Disagree	Agree	Opinion	Disagree
Graduation between 1955 and 1969	76	17	7	89	11	0
Graduation between 1980 and 1994	68	17	15	82	13	5

Table 11
Comparison of responses of alumni who graduated between 1980 and 1994
to those who graduated between 1955 and 1969 to the statement:
Our curriculum should place more emphasis on the management of refractive surgery patients.

	C	DD Practic No	es	OD	-MD Prac No	tices
	Agree	Opinion	Disagree	Agree	Opinion	Disagree
Graduation between 1955 and 1969	63	29	8	89	11	0
Graduation between 1980 and 1994	68	25	7	86	12	2

vision. Of those respondents mentioning ocular disease treatment the majority were positive, saying, in effect, that they were well satisfied with their instruction in this area; but several respondents expressed the opinion that they believed the emphasis on ocular disease treatment was accompanied by a lack of emphasis on some of the traditional areas of optometry. Many of the respondents expressed their opinions on subjects such as practice management, managed care, and a perceived over-supply of optometry graduates—none of

which were included in the questionnaire.

The excerpts of comments given in Table 12 are representative of those received. Each comment is followed by the respondent's mode of practice and year of graduation. These comments are typical of many others that were received, some applauding the expansion of optometry into eye disease treatment and the management of refractive surgery patients, and others warning that optometry must maintain its superiority in the traditional optometric areas of refraction,

dispensing of glasses and contact lenses, and the care of binocular vision and low vision problems.

Percentages of Income Derived From Various Patient Care Services

We have been concerned that many of our entering students have the mistaken belief that, as practitioners, their main activity will be the treatment of eye diseases. This belief is in sharp contrast to the results of an unpublished survey of 80 highly successful optometric practices conducted by Baush & Lomb,² in which it was

Table 12 Excerpts from representative comments made by respondents

Ocular disease should even be stressed more than it is now. Resident, class of 1994

I strongly agree that binocular vision problems need to be stressed more. Joint OD practice, class of 1994

Optometry schools need to provide more practice management/marketing education to survive in today's world. *Joint OD practice and HMO, class of 1992*

The emphasis on ocular disease is great; however, the fitting and dispensing of eyewear and contacts is still the OD's bread and butter. *Joint OD practice, class of 1991*

Although I enjoy therapeutics, it is not rewarding financially. Joint OD practice, class of 1990

I believe your thrust is for optometry not to forget its roots. A good refraction is why most of our patients are in to see us. *Solo practice, class of 1989*

We must preserve excellence in the areas of optometry in which ophthalmologists have no interest (contact lenses, low vision, vision therapy, complex refractive problems) in order to differentiate ourselves in the eyes of the public. Self-employed, working for vacationing ODs, class of 1989

Knowing about ocular disease is certainly important but it doesn't put bread on the table. *Joint OD practice, class of* 1985

The greatest portion of primary care optometric practice will always be refractive problems. Solo practice, class of 1983

There are far more binocular vision problems than there are medical problems. Solo practice, class of 1980

I believe it is of vital importance for optometry to embrace its ability to solve visual problems using both ophthalmic and contact lenses. This niche is unique to optometry. No other profession is so qualified. Increasing our scope of practice is important – only if we have the strong foundation and apply this unique perspective to our patient base. *Solo practice, class of 1980*

Students should be exposed to the management of refractive surgery at a refractive surgery center. *Joint OD practice, class of 1979*

It is crucial that ODs be licensed to use lasers! Solo practice, class of 1976

Low vision care is often overlooked as a treatment option. Low vision practice, class of 1974

Testing for fixation disparity has helped me to build my practice. Joint OD practice, class of 1971

TPAs have greatly improved my practice, life, and future. Solo practice, class of 1971

I think it is good that we get more involved in the treatment of eye diseases, but we are forgetting our roots; we are losing the art of refracting and contact lens fitting. *Joint OD practice, class of 1969*

An OD should know how to read CT scans, MRI, fluorescein angiography, blood-work, etc. *Joint OD-MD practice, class of 1965*

We certainly need to retain the basis of optometry. Too many ODs think that medicine is the basis of optometry now. *Solo practice, class of 1960*

Dispensing can make or break your practice, more so than good optometric care. Solo practice, class of 1959

found that the average income from the treatment of eye diseases in those 80 practices was about 2% of total income, with a range extending no higher than 5%.

Following is a brief summary of our Optometric Economics report:1 Questionnaire recipients were asked to estimate the percentage of their annual income derived from each of the following: glasses (including examination, fitting, follow-up), contact lenses (including examination, fitting, follow-up), vision therapy, low vision care, and treatment of eye diseases. Perhaps not surprisingly, the greatest differences between OD and OD-MD practice repondents concerned income from traditional optometric services (examination, glasses, contact lenses, vision therapy, low vision care) as compared to treatment of eye diseases. For OD practice respondents, a mean of 93% of annual income was derived from traditional optometric services and a mean of 7% was derived from the treatment of eye diseases; whereas for OD-MD practice respondents, a mean of 62% of annual income was derived from traditional optometric services while a mean of 38% was derived from the treatment of eye diseases.

Income from vision therapy and from low vision care each averaged no more than 1%, for both OD practice respondents and OD-MD practice respondents. In spite of these low averages, 10 respondents reported 10% or more of their income from vision therapy; and 12 respondents reported 10% or more of their income from low vision care, of which one reported 20% and one reported 100%.

Discussion

The results of our study, as stated here and in our previous report,¹ make it obvious that two groups of optometric practitioners have emerged: the majority, made up of those engaged in solo practices and in joint OD practices, 93% of whose mean income is derived from traditional optometric care and 7% is derived from the treatment of eye diseases; and those in OD-MD practices, whose income from the treatment of eye diseases averages 38% but in a few cases is as high as 100%

In ophthalmology also, two groups of practitioners have emerged. In an analysis of the changes that have taken place in both optometry and ophthalmology, Myers³ concluded

that a small minority of ophthalmologists have taken advantage of the changes in their profession which have included replacement of hospital-based surgery by surgical centers, the popularity of refractive surgery, and changing patterns in optometric referrals, while the larger group continues to practice comprehensive ophthalmology. Javitt4 reported that 93% of the ophthalmologists who do cataract extractions for Medicare beneficiaries do 200 or fewer cases per year, devoting the majority of their time to primary care aspects of ophthalmology, while the other 7%do as many as 1,000 or more cataract extractions per year. Discussing the role of ophthalmology in the era of managed care, Frankel⁵ — an ophthalmologist suggested that optometrists, rather than ophthalmologists, may in many cases be the primary eyecare providers. He also suggested that primary care physicians may choose to refer patients to affiliated optometrists rather than to ophthalmologists.

The Importance of Traditional Optometry

Many optometrists have warned that while expanding into medicallyoriented areas of eye care, we must not neglect traditional optometric care. Borish⁶ called for a comprehensive reevaluation of clinical teaching, saying "If optometry persists in slighting its traditional services, there are many others ready and willing to take over." Sheedy' reminded us of the important role of glasses in optometry, stating the obvious fact that the main reason people visit an optometrist is to get a pair of glasses, and that 60% of the U.S. population requires ophthalmic correction. He called for increased emphasis on research to provide a better scientific basis for spectacle lenses, and concluded that "the academic leadership in ophthalmic optics is there for the taking."

In a guest editorial in a special issue of the JAOA on the subject of refraction, Goss and Penisten⁸ discussed four major factors for the importance of clinical refraction: (1) most people recognize the optometrist as the practitioner who can provide them with clear, comfortable vision; (2) to maintain its status as the primary care profession for eye and vision conditions, and because of the high prevalence of refractive conditions, optometry must retain its

emphasis in the area of refraction; (3) refraction is one of the "core competencies" of optometry, and to abandon refraction would be to risk failure as a profession; and (4) the income of optometrists is largely dependent upon refraction and the prescription of eyewear.

Conclusions

- 1. The great majority of those responding to our questionnaire agreed that optometrists should be very good at all aspects of eye and vision care including refraction, basic binocular vision problems, contact lens practice, and the diagnosis and treatment of eye diseases.
- 2. The majority of respondents to our questionnaire those in solo practice or practicing jointly with other optometrists reported that a mean of 93% of their income was derived from traditional optometric services and a mean of 7% from the treatment of eye diseases.
- 3. We suggest that traditional optometric subjects should continue to be areas of major emphasis in the optometry school curriculum.

Acknowledgements

We sincerely thank those alumni who returned the questionnaires, making this report possible. We are pleased to acknowledge the valuable assistance of final year students (now Doctors of Optometry) Christopher Bettner, Eric Hanson, Carol Lynn, Angela Rexing, and Nadia Zalatimo.

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Relationship Between Affective and Psychomotor Skill On a National Assessment

Leon J. Gross, Ph.D. Charles L. Haine, O.D., M.S.

The purpose of this study was to explore the potential relationship between affective and psychomotor skill. Affective skill is carefu assessed or the health professions, primarily because it is considered easy to feigh. The data for this study were provided by a national, standardized, performance test used for licensure in optometry. The evaluation instrunumber consisted of 283 perior behavword checklest stems that summed to 796 points. The accreptelyring majorthe of these thems and noonly assessed psychomotor skill; nine of the items (22 of the 246 points), compress the allo dia combaniano The results but e cated that there was little general relationship between affective and psychomotor skill. However, when the affective performance was dichoto-મનોડાથી વિજયત માના મોડાવી મહા મેનાના કરવાના છો? the 22-point affective scale, significontly poorer psychomotor performance was detected for examinees with pear affective performance. These results suggest that affective skill is measurable and related to psychono-

KEY WORDS: affective skill, psychamptor skill, clinical assessment

loom's1 classic Taxonomy of Educational Objectives cites three distinct skill domains: cognitive, psychomotor, and affective.In health professions licensure testing, cognitive skill is overwhelmingly the most frequently measured. There has been significant growth in the assessment of psychomotor skill in optometry2, in dentistry3, and in medicine4. However, activity in the assessment of affective behavior has been relatively dormant, despite, as the following authors have observed, compelling logic and data supporting a relationship between affective skill and the quality of patient care.

Bennett⁵ noted that the most common reason for patients changing optometrists is dissatisfaction with the attitude of the optometrist, as well as a lack of adequate communication. Comstock and associates⁶ noted that patient satisfaction is strongly correlated with physician courtesy, as well as with information-giving. Cohen

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and associates⁷ reported the attainment of adequate psychometric properties of checklist and rating scale forms in evaluating the interpersonal and communication skills of physicians. Johnson and Kurtz⁸ discussed the issue of respectful and sensitive name usage during the initial phase of the physician-patient encounter. The authors stated that such name usage is important for a humanistic doctor-patient interaction and that the appropriate introduction, specifically greeting the patient, creates an interactive milieu with the potential to facilitate the diagnostic and treatment processes.

Why, then, has affective skill assessment been relatively neglected in clinical assessment? Perhaps it is because affective behaviors are easy to feign, as they represent attitudes that appear capable of being "turned on" or "turned off" at will, rather than being skills that require extensive effort to develop, such as in the cognitive and psychomotor domains. Relatedly, affective skill may be seen as being unlikely to contribute, in a meaningful way, to the broader measurement of clinical skill. With little clamor among regulators for assessing affective skill, the difficulties in reliably measuring affective skill relegate its assessment to the "back burner."

Description of Assessment

The National Board of Examiners in Optometry develops, administers, and reports the results of a national, standardized, entry-level, process-oriented performance test. This 5-station Clinical Skills examination (CSE) is the first section of a 3-section Patient Care (PC) examination. More than 80% of the state licensure boards in optometry use this examination in lieu of developing their own assessment. A full description of this examination is provided by Gross².

The second PC section contains 50 multiple-choice clinical scenario items based on color photographs of a variety of ocular conditions. The third section consists of five written patient management problem (PMP) simulations. For scoring and standard setting purposes, the second and third sections comprise the sixth and seventh stations of this integrated PC examination. The data in this study, however, pertain only to the CSE section.

From its inception, the CSE was structured to measure performance demonstrative primarily of psychomotor skill. The CSE also assessed a considerable amount of communication skill in case history assessment. Candidates' skill in briefly explaining clinical findings, diagnoses, and treatment regimens to a patient, and in verbally preparing a patient for various portions of an ocular examination (e.g., explaining the purpose of the test), were assessed also.On a more limited basis, the CSE also assessed affective skill.

The 1994 administration of the CSE consisted of five stations in which 18 skills were assessed. Table 1 lists the five stations and the clinical skills assessed at each station.

The number of items comprising each of the 18 skills ranged from 8 to 36, and the number of points ranged from 20 to 144. The total section contained 283 items which summed to 796 points.

Of the 283 items, 9 items totaling 22 points comprised the embedded affective component. Included were 1-3 affective items per station that were not an inherent part of any of the component skills. These items, referred to as general station procedures, evaluated whether the candi-

date greeted the patient, which was to be done at the beginning of each of five stations, whether the candidate properly washed his or her hands, which was assessed at the beginning of two stations, and whether the candidate maintained proper hygiene throughout the examination at the station, which was assessed at the end of two stations.

The latter two items were affective skills that were unrelated to patient communication and rather, related to public health considerations. In some assessment models, these procedures would be categorized as motor rather than as affective. However, none of these items required any procedural or technical skill; they simply were to be performed.

These items were considered affective because their being duly performed reflected the candidate's attitude regarding placing a value on maintaining hygiene. Unlike surgical scrubbing in which technique is vital, the mere performance of handwashing on the CSE, irrespective of technique, was considered sufficient. This

affective paradigm is analogous to a nurse or physician assistant drawing curtains around a patient about to disrobe. The motor activity is evaluated not for technique, but rather to observe whether the candidate valued the patient's privacy.

Each CSE item was rated on a 1-10 criticality scale based on the importance of the item to a satisfactory patient care outcome. Table 2 displays the criticality scale. Based on the item scoring weights, the total number of points for the section was 796.

Candidates examine real patients in four of the five stations. In the other station, an examiner portrays a patient for case history and communication skills assessment. The remaining skill assessed at that station does not require a patient, as candidates are responsible for evaluating the characteristics of ophthalmic materials (e.g., spectacle lenses {commonly referred to as eyeglasses}).

Although the overall PC examination is scored as a single integrated test, the distinct formats of three sections require separate scoring mecha-

Table 1 Stations and Clinical Skills

Skills Assessed by Station	Number of Items	Number of Points
Station 1		
General Station Procedures*	1	4
1. General Case History/Patient Communication	36	144
2. Ophthalmic Materials Evaluation	18	20
Station 2		
General Station Procedures	3	7
3. Biomicroscopy	20	71
4. Goldmann Applanation Tonometry	15	52
5. Gonioscopy	13	43
Station 3		
General Station Procedures	. 1	1
6. Keratometry	13	27
7. Retinoscopy	13	44
8. Distance Subjective Refraction	18	56
Station 4		
General Station Procedures	1	1
9. Cover Test Evaluation	8	28
10. Heterophoria Measurement	14	28
11. Vergence Testing	11	26
12. Accommodation Testing	11	23
13. Amsler Grid Testing	10	23
14. Pupil Testing	11	34
Station 5		
General Station Procedures	3	9
15. Binocular Indirect Ophthalmoscopy	11	42
16. Fundus Lens Evaluation	16	36
17. Soft Contact Lens Insertion, Evaluation, and Removal	18	43
18. Rigid Gas Permeable Contact Lens Insertion and Removal	18	34
TOTAL	283	796

^{*} General Station procedures sum to 9 items and 22 points.

Table 2 Rating Scale for Item Criticality*

Scori	ng Weight and Significance	Explanation	
10 9 8	Essential	essential for satisfactory patient care; poor performance would result in deficient patient care	
7 6 5	Very Important	very likely to affect the quality of patient care; only extraordinary measures could compen- sate for poor performance	
4 3 2	Important	likely to, but would not necessarily affect the quality of patient care	
1	Desirable	desirable activity, but would not seriously affect the quality of patient care if done incorrectly, or not at all	

*Developed by the National Board of Examiners in Optometry

nisms. Scoring and standard setting is conducted for each section, with the outcomes combined to produce the overall candidate scores and pass-fail standard. As the CSE contains five of the seven stations, it accounts for nearly two-thirds of the overall score and pass-fail standard.

Within the CSE, scoring and standard setting are interrelated. Scoring is based on the differential item criticality weights referred to in Table 2. The standard setting methodology is based on identifying the minimal amount of error per skill that, if committed, is sufficient for candidate performance for that skill to be considered subpar. This minimal amount of intolerable error is based on candidate failure to properly perform the most critical task (i.e., item) within each skill, despite performing all other tasks (i.e., items) properly.In other words, for each of the 18 skills, the most critical item is treated as if omitting it or not performing it correctly is the "point of no return." This standard setting task is completed by the examination committee for each of the 18 clinical skills.

For example, consider a skill worth 40 points in which the most critically weighted item is worth 8 points. The minimum pass score for the skill would be 33 points. Candidates properly performing all but the most critical item would receive a score of 32, the highest possible subpar score. Neither individual skills, individual stations, nor the CSE section must be passed, however; under compensatory scoring, passing is at the level of

the overall PC examination. The purpose of the skill and section cutoffs is to compute the CSE's contribution to the overall PC pass-fail cutoff score.

The actual CSE grading format is in the form of a yes-no behavioral checklist. For each performance task or item, "yes" indicates that the task was either performed or performed satisfactorily, and "no" indicates that the task was either not performed or performed unsatisfactorily. Candidates receive the full scoring weight for each item recorded by the examiner as "yes"; a score of zero is received for each item recorded by the examiner as "no." Examiners are not informed of the item scoring weights, however, in order to reinforce their role as performance auditors, rather than as passfail decision-makers.

Methods

The analyses were to consist of comparisons between performance on the nine affective items and performance on the overall CSE.As noted earlier, none of the affective items required any procedural or technical skill; they simply were to be performed. Furthermore, as all of the evaluation checklists were published in the National Board Candidate Guide, all candidates knew that they were expected to perform these tasks. Given these conditions for affective performance, there was little reason to expect a substantive relationship between performance on these items and overall score on the CSE, as virtually all candidates would be expected to perform well on the affective assessment, regardless of their psychomotor performance. The purpose of this investigation was to explore that potential relationship.

Results

The Spring 1994 CSE provided the data for this study. The examination was administered to 857 candidates in 13 test centers during four weekends in May and June 1994. Table 3 displays the distribution of the affective points, the number of candidates attaining each, the candidates' overall section mean score, and their overall section pass rate. These data support the initial skepticism that affective performance would exhibit any meaningful relationships. The overwhelming majority of candidates (81.1%) obtained a perfect score, and the mean number of affective points attained (21.2/22) was 96.4%. Furthermore, the correlation between affective performance and overall performance was a modest .28, despite being statistically significant (p<.05). These data underscored the easiness of the affective items (i.e., "nothing to it but to do it").

Suspecting a threshold rather than a continuous relationship, performance on the affective items was recoded to maximimally distinguish corresponding performance on the overall CSE. Using 16 points as the threshold (greater than or equal to vs. less than) a meaningful relationship emerged, as shown numerically in Table 4 and graphically in Figure 1. Although only 19 of the candidates (2.2%) scored below 16 points on the affective items, these candidates showed themselves to be significantly poorer in overall clinical performance. Their mean score was 5.7 percentage points below the overall mean of the candidates with medium and high affective performance. These mean scores were then recalculated without the affective points. Although the mean difference was reduced by one percentage point to 4.7%, it was nonetheless significant $(t_{855}=3.81; p<.01)$. More importantly, the pass rate for the 19 candidates with low affective performance was only 57.9%, more than 30% below the pass rate of the candidates with medium and high affective performance.

This disparity in performance was greater than anticipated. Furthermore, the disparity could not be attributed to simply poor affective performance, as too few points were associated with these items to predominate in a candidate's poor overall performance. Rather,

the threshold analysis indicates that although there is little relationship between affective and psychomotor performance for most candidates, individuals with low affective performance are also much more likely to exhibit relatively poor psychomotor performance. It could be argued that any item grouping on the CSE would produce the same performance differential among the weak candidates. However, as this argument assumes similar performance differentials on both domains, it reinforces the obtained relationship between the poor affective and poor psychomotor performance.

Conclusions

The data in this study, taken from a national performance test used for licensure in optometry, reveal a relationship between affective and psychomotor skill. The relationship is limited to individuals who have low affective performance, but reveals that such individuals are likely to have other clinical and technical deficiencies.

Ultimately, two conclusions worthy of further study emerged. First, affective skill is measurable. Second, individuals with a deficient level of psychomotor skill are more likely to have a deficient level of affective skill than are individuals with an adequate level of psychomotor skill. These conclusions suggest that clinical education may benefit from increased attention to affective skill

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Table 3
Affective vs. Total Section Performance

Affective Points *Attained	Number of Candidates	Overall CSE **Mean (%)	Overall CSE Pass Rate (%)
<=9	0	-	
10	4	71.7	25.0
11	Ô	71.7	20.0
12	1	75.3	0.0
13	1	83.2	100.0
14	13	86.9	69.2
15	0		
16	9	88.9	88.9
17	6	83.0	50.0
18	92	85.6	72.8
19	2	88.6	100.0
20	18	85.5	61.1
21	16	88.6	93.8
22	695	89.1	91.8
**Overall	857	88.5	88.1

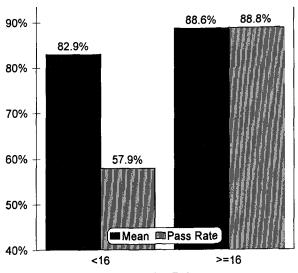
^{*} mean number of affective points attained is 21.2 (96.4%)

** maximum number of points is 796

Table 4
Affective vs. Total Section Performance (Recoded)

Affective Points Attained	Number of Candidates	Overall CSE Mean (%)	Overall CSE Pass Rate (%)
<16	19	82.9	57.9
>=16	838	88.6	88.8

Figure 1
Means and Pass Rates for Recoded Data



^{***} product-moment correlation between affective and overall performance is 0.28

RESOURCES

I REVIE

Manual of Primary Eye Care.

Narciss Okhravi, Oxford: Butterworth-Heinemann, 1997, 176 pp. \$42.50.

Manual of Primary Eye Care was written by a British ophthalmologist "...to guide and inform a team of nurses who were starting a Minor Injuries Unit at a local District General Hospital." The author hoped that the manual would "...guide the practitioner through making the diagnosis to treating the patient and ultimately referring those who require this." The topics covered include gross anatomy of the eye, examination techniques, two sections on common eye problems that might present to an emergency room, and treatment techniques. The book begins with a page titled "How to use this book" and there is also a guide for referring the patient. Perhaps the author has achieved her goal for nurses in the UK, but the information as presented lacks the depth necessary for an American optometry student or practitioner of the '90s who would probably manage most of the problems presented without referral.

Manual of Primary Eye Care contains numerous high quality color photographs of common eye problems. There is a glossary at the end of the book since the author wanted to write a text that was "jargonfree." The definitions are brief and not intended to be complete; the reader is referred to an ophthalmology textbook for details. The author does not specify which ophthalmology textbook, and in fact includes no references or bibliography anywhere in the book. In my opinion, the lack of references makes all of the information in the book dubious at best.

The print used in Manual of Primary Eye Care is larger than usually used in text books for adults. Since the information in the book was so superficial, I could not help but wonder if the large print was used to fill pages. I also found the text difficult to read due to poor grammar and sentence structure. For example the possessive pronoun ("...the patient cannot open their eyes.") is used incorrectly throughout the book.

While this book may be useful for its intended audience (emergency room nurses) as written, it is of limited use to the serious student or practitioner of primary eye care.

Reviewer: Dr. Nancy Carlson The New England College of Optometry

Dryness, Tears and Contact Lens Wear (Clinical Practice in Contact Lenses). Gerald E. Lowther, Woburn: Butterworth-Heinemann, 1997, 120 pp., \$45.00.

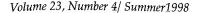
This is the first in a series of clinically oriented manuscripts directed specifically at the common problems in contact lens practice, and is a good example of how big things can come in small packages. It is a small thin book of 91 pages of text constituting an excellent discussion of a problem so often encountered by the clinician who fits soft contact lenses. The substance is written in an easy manner with just enough theory to give the clinician a background for the differential diagnosis and practical recommendations on management that follow. The graphs and tables are large and simple to read, and the figures are clear and well documented.

In true problem-solving fashion, the book starts with a statement of the problem. The first chapter is on hydrogel lenses and tear problems and begins with the subject of lens dehydration and the subsequent loss of transmitted oxygen, corneal staining, lens adherence, deposit formation and conjunctival changes. Examination of the patient and predicting tear film-related problems with hydrogel lens wear is next. This is a large portion of the book and contains some high quality color photographs of the commonly encountered observations in the dry eye patient. This chapter can be considered the differential diagnosis information.

An equally large chapter follows that discusses handling hydrogel lens patients with contact lens-tear film problems and is the management side of the problem. All conventional treatments are covered, and what I found especially useful were a few small summary tables like "What we know about the effect of material on dehydration" followed by four items, or "What we know about lens design and dryness." And finally there is a passing shot at rigid gas-permeable contact lenses and tear problems. The references are extensive and current and the index is justifiably

I would recommend that all clinicians who fit soft contact lenses read this book and not just buy it for their library. After reading it, I am sure their problem-solving ability related to the dry eye patient will improve dramatically.

Reviewer: Dr. Lester E. Janoff Nova Southeastern University Health Professions Division College of Optometry



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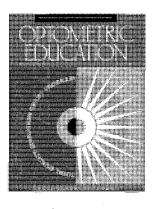
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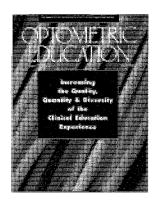


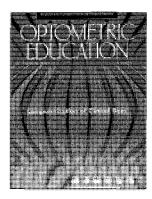
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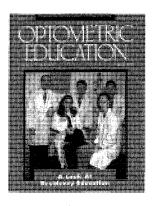
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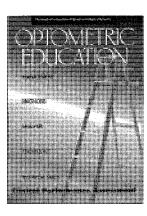
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