22. A Stopgap Measure: Home Study Courses

Let us speak first of the ideal condition [for training]; *second,* the situation as it is at present, and *third,* how can these two be reconciled.

HARRY S. GRADLE, 1938

WHAT DR. GRADLE proposed to make up the difference between the ideal and the actual in specialty education was that the Academy offer a course of home study in the basic sciences for ophthalmic and otolaryngic residents. "It means a lot of work for the committee that undertakes it," he acknowledged, "but it will give to another 50 per cent of the men . . . instruction that they are not getting at present."[1]

Harry Gradle called the plan "a stop-gap to fill in the period of here where we have inadequate instruction to here where all the institutions are giving the proper type of instruction to their residents."[2(p10)] Although the courses in the beginning plugged a hole in specialty education, their value as an adjunct to specialty education did not diminish with time and the growth of excellent training programs.

In 1938, when Dr Gradle presented his idea, it was slightly shocking. "A medical correspondence course? What next?" thought some. The Academy leadership considered it perhaps too venturesome, and reactions were mixed among the membership at large.

The idea was soon engulfed in a sea of questions: How well would it set with graduate medicine, or in effect, could graduate schools and their administrators swallow what might seem an affront to their capabilities? Would training centers and hospitals help by providing reading materials and supervision for those taking the courses? Would the courses be used, perhaps by general practitioners, as a short-cut to specialty practice? Did the Academy have the right to support something not of immediate value to its members? These were only some of the questions that pounced on the idea itself. There were, of course, many other questions involving the administrative and financial angles of setting up such courses.

Harry Gradle and Ralph A. Fenton were appointed as an investigating committee to map out a concrete method for home study courses. That wasn't difficult since Dr Gradle was seldom an off-the-cuff idea man and had already decided to pattern the courses after the army correspondence courses for reserve officers which had inspired his idea.

The plan was to send registrants a list of selected reading on a different topic each month. It was estimated that to cover the

reading material adequately would require from 1 to 1½ hours a night. At the end of the month, the registrant would receive a 20-question quiz covering the reading material, which he could answer with the help of textbooks and teachers. The answers would be returned to an Academy committee, graded, and returned to the registrant.[3,4] It was a simple, and as the years would show, effective plan.

Dr Gradle somewhat jumped the gun by prematurely announcing at the Clinical Congress of the American College of Surgeons, immediately following the Academy's 1938 meeting, that the Academy would begin the courses in July 1939.[5] His enthusiasm was not shared by other Academy leaders who viewed the initiation of such courses as a delicate situation and were moving with extreme caution.

Early in 1939, the Academy sent a description of the proposed courses to 140 hospitals known to be training residents, asking their reaction to the proposal and whether their institution would be willing to participate.[6] By August, a rather unimpressive 52 responses had been received, 33 favorable and 19 against.[7]

In the meantime, the Academy had assembled a tribunal of opinion, representatives of different divisions of graduate medicine, for debating the question of "Supervised Home Study for Residents" at the October 1939 meeting of the Teachers' Section. On the panel of debators were the director of the American College of Surgeons, the president of the American Hospital Association, the secretary of the AMA Council on Medical Education and Hospitals, the dean of the University of Nebraska College of Medicine, a representative of the American Board of Ophthalmology and the American Board of Otolaryngology, and two representatives of the Academy, Dr Gradle for ophthalmology and Dr Fenton for otolaryngology.[2]

"Five old men" of the Academy—George M. Coates, George J. Taquino, William L. Benedict, Grady E. Clay, and Thomas E. Carmody—were selected as a supreme court to weigh the evidence presented and pass judgment on the courses after the last argument rested.

Actually, the debators all seemed to be on the same squad. Most thought that any contribution to graduate training would be worthwhile and that if graduate medical educators objected to the courses they would have to come up with something better, a development that would be welcomed by all. The panel agreed that any hospital attempting to teach specialties should certainly be amenable to a course of organized home study and that the staffs at non-university-affiliated hospitals should be glad for a demonstration, via the courses, of what the educational content of a residency should be.

There were questions as to how effectively the basic sciences could be taught from textbooks, without laboratories. Harry Gradle, with his usual aplomb, scanned those in attendance and declared he saw many a successful clinician and was willing to bet "not one in one hundred went through laboratories in their graduate years."[2(p14)] Laboratories were needed, yes, but they weren't there, and Dr Gradle asked metaphorically if they preferred to leave a man stranded because they couldn't provide him with Rolls Royce perfection.

To inhibit physicians who might take the Home Study Course and consider it their specialty training and entrée to specialty practice, a minimum requirement for acceptance to the course was thought essential. Stringent requirements were proposed, but the one finally adopted was more lenient: "Any graduate physician is eligible for the Home Study Course after completion of one year's rotating internship or its equivalent, who has committed himself in writing to the secretary of the American Academy of Ophthalmology and Otolaryngology that he is planning to enter the specialty and will, when prepared, take the ex-

amination of the respective Board."[8] The promise to take a Board examination was deleted from the application form in 1943.

Another matter was whether the resident should pay for taking the course or whether the Academy should bear the full expense, estimated to be about $2,500 a year for a course in both specialties. The resident, it was conceded, could not sustain too steep a price, but many believed that a resident who paid something for the course might be more inclined to study and complete it. Ten dollars was fixed as the cost to the applicant for the nine months' course. Thirty years later, the price was still a minimal $25 for the 1969-1970 Home Study Course in either specialty. In 1978, at the price of $150 for the two-part Ophthalmology Basic and Clinical Science Course or Continuing Education Course in Otolaryngology, both extending over a two-year period, the courses were still an educational bargain.

Although the men taking this course will not be members of the Academy, reasoned Walter Lancaster at the 1939 debate, "they are all prospective members."[2(p13)] This comment put to rest the issue of whether the Academy should undertake courses for nonmembers. No one balked at the Academy assuming a role as educator below the practitioner level, and the courses were deemed a wise investment on the Academy's part in its future members. Dr Lancaster even suggested that the Academy might come out ahead by experiencing a large growth in membership,[2(p20)] presumedly because more physicians would pass the Boards and thus be eligible for membership.

Panel members were favorably predisposed by the Academy's past record in the field of education. Robin C. Buerki, president of the AHA and general secretary of the Commission on Graduate Medical Education, called Academy members "pioneers and crusaders" in graduate education who had done "more thinking and clearer thinking" on the curriculum for specialty training.[2(p12)] "Somebody has to blaze the trail,"[2(p12)] he said, and C. W. M. Poynter, dean of the University of Nebraska College of Medicine, thought the courses would be "much less of an experiment than . . . in the other specialty fields,"[2(p12)] because of the long experience of the Boards of ophthalmology and otolaryngology and of the Academy in determining the requirements for graduate training.

When discussion ceased, the specially appointed supreme court drew up a resolution, subsequently approved by Council, recommending the Academy "institute and support a home study course in the fundamental sciences requisite to adequate preparation for the practice of ophthalmology and otolaryngology. . . ."[2(p20)] Harry S. Gradle, for ophthalmology, and Frank J. Novak, Jr, for otolaryngology, were designated the Committee on Home Study Courses.

Much preliminary work on the topics, reading material, and questions for the courses had preceded the final decision to actually give them. Members of both Boards were consulted for their opinions, and before the first offering, the Academy sought and received tentative Board approval of the courses, with the stipulation that neither Board required nor gave credit for the courses.

For the inaugural course in ophthalmology, Harry Gradle planned eight sections and appointed one faculty member for each: anatomy, histology, and embryology (Thomas D. Allen); optics and visual physiology (Alfred Cowan); physiology (Dr Gradle); pathology (Georgiana Theobald); refraction (John Green); perimetry (William Benedict); muscles (Conrad Berens); and biomicroscopy and ophthalmoscopy (Robert J. Masters).[9,10]

Frank Novak included nine sections in the otolaryngology course, with a similar faculty of one for each: anatomy I (Frederick T. Hill); anatomy II (W. E. Grove); histology-pathology

(Dr Novak); physiology (C. Stewart Nash); bacteriology (Gordon D. Hoople); biochemistry (Carl H. McCaskey); otolaryngologic examination (Walter Theobald); hearing tests (Werner Mueller); and vestibular tests (J. M. Sutherland).[10,11]

Publicity for the courses stressed that no endeavor was being made to teach clinical ophthalmology or otolaryngology, although principles of some of the clinical aspects would be included.[12] The faculties helped compile the final reading lists and prepare the questions for, and later grade, the monthly examinations.

An entirely unexpected 485 physicians registered for the first Home Study Courses that began Aug 1, 1940, with the proportion of three for the ophthalmology course to one for the otolaryngology course. Some registrants soon dropped out, either because they had to enter military service or because the course required more time than they were able to give. By December, there were about 450 registrants. Interestingly enough, Dr Gradle reported that only about 150 of these were residents, and the remaining 300 were physicians preparing for specialty practice by means other than a residency or practicing specialists who wished to review the fundamentals. Some of the latter requested and were granted the privilege of receiving the reading lists and questions without being required to complete the monthly examinations.[13]

The registration figure, after depreciation, dwindled to 415 (301 in the ophthalmology course and 114 in the otolaryngology course). A final breakdown of registrants showed only 15% were residents, 10% were general practitioners, 30% were practicing ophthalmologists, 5% were practicing otolaryngologists, and 40% were practicing EENT specialists. The average age was 36 years.[10]

Drs Gradle and Novak had allowed their imagination to stretch only to a maximum of 250 registrants, so the unprecedented number caught everyone somewhat underequipped. Book dealers, who knew of the courses and required texts, were overwhelmed by the demand, and supplies were soon exhausted. Also exhausted were faculty members who had to enlist the aid of men throughout the country to correct and return examination papers, which proved no small task.[10,13]

The courses were so successful that Dr Gradle was soon suggesting (in 1942) the Academy present clinical home study courses, open to those who had completed the basic course.[14(p132)] He received Council approval to move forward when conditions were favorable, but Harry Gradle, never one to rest on an idea, was forced to rest on this one, first by the war and then by his failing health.

Although mention of his proposal for clinical courses cropped up from time to time and some of the home study lessons afforded reading on clinical aspects,[15] the concept did not blossom until 1970 when the courses were restructured to integrate fundamental and clinical science and extended over a two-year period.

The Second World War drastically reduced in number the anonymous corps of Academy members who graded examinations and, to a lesser extent, the course enrollment. During the war years, only 50 registrants in each course received corrected examination papers, and the remainder received a model lesson paper based on the best answers among the 50 submitted for correction.[16]

Registrants fell to an all-time low of 200 for the 1943–1944 courses and then flooded in after the war, with 544 in the fall of 1946 and 656 in the fall of 1947, the latter a peak registration that was not surpassed until the mid-sixties. Practitioners taking the courses still heavily outweighed residents. Survey replies received from 468 of the 1947 registrants disclosed only one third were in training.[17(p125),18]

Although no one minded practicing specialists shoring up their knowledge with the Home Study Courses, there was some initial disappointment that more residents weren't taking the courses. An Academy editorial in 1946 pointed out that the Boards of ophthalmology and otolaryngology had failed 15% to 30% of examinees during the past decade and tactfully suggested that graduate schools and hospitals could greatly augment their teaching in the basic sciences by making use of the Home Study Courses.[19]

By 1950, residents were accounting for 50% of the enrollment, and by 1963, the balance had tipped to 78% residents.[20,21(p86)]

The ample student body for the courses precipitated a faculty expansion in 1946. The policy adopted provided for a senior faculty member for each section and an associate who would succeed to the senior position at the end of every four years, with the senior member elevated to consultant.[22(p116)] This tight contingent of faculty members, often assisted in correcting papers by their younger associates, was maintained until the 1960s when large recruitments to the faculty were made.

To publicize something of the history, scope, and accomplishments of the Home Study Courses, an exhibit was prepared for display at the 1947 Academy meeting.[22(p117)] So successful was this exhibit that it was sent to Havana, Cuba, for the third Pan-American Congress of Ophthalmology.[23(pp7-8)] Since that time, exhibits have been prepared for most Academy meetings to advertise and explain the Home Study Courses, and since 1971, the multifaceted offerings of the Continuing Education Programs (Fig 51).

Another meeting feature was added in 1948. Discussion periods on the subjects covered in the ophthalmology course were arranged as part of the instructional program.[23(p5)] Those taking the course, and others interested, were

Fig 51.—Continuing Education exhibit at 1977 meeting.

encouraged to attend and discuss with the course faculty problems and questions relative to the material.

Similar discussion periods for the otolaryngology course were planned for the next meeting but proved less popular.[24] They were tried again but did not become an annual tradition, as did the ones in ophthalmology.

Course content was expanded in the late forties. External diseases and a section on pharmacology and therapeutics were added to the ophthalmology course, enlarging the course to ten sections and adding the month of June to the former September through May course time. In the otolaryngology course, a section on pharmacology replaced the one on otolaryngologic examination, and the addition of otologic acoustics to the curriculum expanded the course to ten sections.

Format of the opthalmology course remained basically the same for 30 years, although lessons were expanded in scope to include ocular microbiology and aseptic technique, neuroanatomy, neuro-ophthalmology, and medical ophthalmology.

The otolaryngologists added a section on principles of surgery and shortened anatomy to

one month in 1961. Then, in 1967, the course was pared from ten to six sections which consolidated existing subjects and included the new subject areas of embryology, radiology, immunology, reconstructive surgery, bronchoesophagology, speech, otoneurology, and a year later, genetics. Time for each section was extended to six weeks.[25(p267)]

The more spacious faculties of the sixties meant better input from authorities on course content. By lightening the load of reviewing and returning papers, they also permitted more copious commentary to students. The original faculty of 17 had multiplied to a faculty of 147 (98 in ophthalmology and 49 in otolaryngology) by 1969,[26(p173)] the last offering before the courses were reconstructed as part of the Continuing Education Programs.

Not only American physicians but foreign physicians as well took the Home Study Courses. Some enthusiastic foreign physicians prompted development of similar courses in their countries, often based on Academy material. Course registrations from 1940 through 1969 totaled 14,957, with 9,395 for the ophthalmology course and 5,562 for the otolaryngology course. Although enrollment did not always mean completion of the course, in terms of returning all assignments, the courses have been part of the educational background of many of today's specialists. They were also a guiding light in development of the teaching curriculum of residency programs.

Everything from policy to paper work for inauguration of the Home Study Courses was handled by the committee of Harry Gradle and Frank Novak who enlisted J. Allan Weiss, an otolaryngologist, as assistant. All three men were Chicagoans, and the courses were actually administered out of Dr Gradle's office at 58 E Washington St. Two other Chicago men, ophthalmologist Daniel Snydacker and otolaryngologist L. Benno Bernheimer (replacing Dr Weiss), were soon added to the committee and stayed on as Dr Gradle's assistants after he became secretary for Home Study Courses in 1944.

When Dr Gradle became too ill to continue in early 1946, Lawrence R. Boies of Minneapolis was appointed acting secretary. Responsibility for course operation was moved from Chicago and lodged with the Executive Office in Rochester, Minn, where it remained. Dr Boies chose two local men as his adjutants, Hendrie W. Grant of St. Paul, who was later named associate secretary for ophthalmology, and Robert E. Priest of Minneapolis, who assisted with the otolaryngology course.

Since there was only one secretarial post for the Home Study Courses, Academy tradition dictated that it be alternated between the two specialties. Daniel Snydacker succeeded Dr Boies as secretary in 1954. Serving with him as associate secretary for otolaryngology was first Ben H. Senturia of St. Louis and later Peter N. Pastore of Richmond, Va, who in 1959 began a long tenure as associate secretary that was to carry over into the Continuing Education Programs of the 1970s.

The final changing of the guard came in 1961 when Dean M. Lierle, after finishing up a year as Academy president, preceded by 23 years as secretary for instruction in otolaryngology, donned yet another responsibility for the Academy as secretary for home study courses. His associates were Dr Pastore and John W. Henderson of Ann Arbor, Mich, as associate secretary for ophthalmology until 1968 when Robison D. Harley of Philadelphia assumed responsibility for the ophthalmology course.

Dr Lierle presided over the transition in 1970 from the limited educational product of Home Study Courses to the Continuing Education Programs. A teacher all of his professional life who made the Department of Otolaryngology and Maxillofacial Surgery at the University of

Iowa world-recognized for its excellence, Dean Lierle had rather prophetically cautioned as far back as 1938 that "with the public and authorities setting higher and higher standards for the profession, government supervision may be around the corner. How much wiser for medicine to encourage independent study, obviating the need for government compulsions."[27]

"To serve adequately," he wrote, "[the physician] must continue to study until his last patient has been seen and his last call made."[27]

By the 1960s, Dr Lierle's gentle suggestion had become a public mandate.