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The Image of Dentistry

A Panel Discussion
Atlantic City, October 12, 1963

INTRODUCTION
Philip E. Blackerby, Jr., D.D.S., M.S.P.H.
President, American College of Dentists

The American College of Dentists is privileged to sponsor this afternoon's program on “The Image of Dentistry.” Among the principal purposes of the College, since its founding in 1920, have been the following, as stated in its Constitution:

1. To promote the ideals of the dental profession;
2. To advance the standards and efficiency of dentistry; and
3. To improve public understanding and appreciation of oral health service.

While we modest dentists have long been convinced that the quality of American dentistry is outstanding throughout the world, we have also been realistic enough to appreciate that we may not always “see ourselves as others see us”—a fact of which we are not infrequently reminded by cartoons, television programs, and quips in newspaper columns that project images of the dentist that are something less than complimentary. Occasional characterizations such as “tooth carpenters” and “oral mechanics” are disconcerting, but they perhaps serve the useful function of keeping us from becoming smug and complacent, and of stimulating the desire to achieve greater public respect and appreciation of the real meaning and significance of dental health service.

John Gardner, in the “Pursuit of Excellence,” offered the following analogy that may be of some comfort to dentistry and other occupations that are inherently less glamorous than careers in, for example, surgery or the theater:

An excellent plumber is infinitely more admirable than an incompetent philosopher. The society which scorns excellence in plumbing because plumbing is an humble activity, and tolerates shoddiness in philosophy because it is an exalted activity, will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water.

One of the latest efforts of the American College of Dentists to “improve public understanding and appreciation of oral health ser-
vice” has been the establishment of a Standing Committee on Social Characteristics. The specific charge of this Committee was stated as follows:

1. to identify or define the social characteristics of dentistry;
2. to develop methods for producing and measuring change in these characteristics; and
3. to develop a program to improve the public image of dentistry, using the resources and membership of the College in all ways that are in keeping with its broad purposes and ideals.

As I am sure you will agree, this is no small task that confronts the Committee. The panel discussion here this afternoon represents one of the Committee’s initial efforts to tackle the first of its stated objectives—“to identify the social characteristics of dentistry.” It is my privilege to introduce to you at this time the Chairman of this Committee, Dr. Walter J. Pelton, who will serve as Moderator for our program this afternoon. Dr. Pelton, after a long and distinguished career in the U. S. Public Health Service, recently accepted a new challenge as Professor and Chairman of the Department of Community Dentistry at the University of Alabama.

OPENING STATEMENT

Walter J. Pelton, D.D.S., M.S.P.H.

Some of my best friends are dentists. I can say the same thing about my worst enemies. I suppose it is logical to conclude that dentists are dentists’ worst enemies.

Whether or not such statement is warranted, it is certainly true that our profession too frequently works at cross purposes. There can be little doubt that the lofty ideals of dentistry, as expressed and advocated by the American College of Dentists, are not always met in “the cold hard facts of dental life as found in the office.”

The only reason there is a dental profession is to provide for the dental ills of people. Our code of ethics and state licensure laws always put the welfare of the public first. Yet, we have professional colleagues whose attitude about public issues parallels that of a former governmental official who said, “What’s good for General Motors is good for the United States.” It is likely that when applied to our field the opposite is true—what’s good for the public is good for the dental profession.

At any rate, rapidly changing social and economic conditions,
which historians liken to the industrial revolution of two or three
generations ago, have placed the dental profession in a new position,
a position of prominence and importance not attained heretofore in
health affairs.

The emergence of dentistry as a wanted health service comes at a
time when the chances of providing dental care to all who seek it
and can finance it seem to be worsening. The measurable growth of
prepayment plans and other forms of purchasing dental care coupled
with the steady decline in the relative number of dentists to popula-
tion, which has been going on since 1930, are trends which create a
larger sellers' market with each passing year.

And how do our confreres react to these trends? "Don't build any
more dental schools, there aren't enough patients to go around,"
some say. Others say, "If you foster prepayment plans where will you
get the dentists?" Sometimes the same dental "friend" is responsible
for expressing both concepts.

Those who resist proposed steps which are clearly intended to
benefit the public assume the position of vested interests. Testimony
of a minority group of dentists during recent legislative hearings con-
cerning grants for dental school construction did little to enhance
the image that dentists are a knowledgeable and responsible group
capable of judging what the future needs of society will be. On the
other hand, the majority group of dentists who testified in favor of
the bill did so with well documented and erudite presentations. No
doubt we gained status by forthright action of the majority group.

Even with the best of images, financing the construction of new
dental schools will not come easy notwithstanding the fact that
matching grant funds may soon become available. Higher education
has many demands, and the job of finding two or three million dol-
lars for matching money to build or alter a dental school isn't lightly
undertaken by any university no matter how wealthy it is. Further-
more, it requires about ten years for a new dental facility to be
planned, financed, built, and to train the first class of students. An-
other five or ten years will be required for a specific school to make
much of a contribution to the additional manpower needed. In the
meantime, the population growth will not remain static and neither
will our image, whatever it is.

Our population has been increasing at the rate of 3 million a year,
and soon, when World War II babies begin to have their own baby
boom, the population increment is expected to reach 5 million a year. Suppose we don't keep up with the demand, whether or not new training spaces for dentists are provided. Will our public image be good enough to prevent the establishment of some other system of providing dental care? Can we expect the populace and their spokesmen to allow us the privilege of retaining our monopoly? Are we justified then in being enemies of each other about where we are going? Can we be complacent about what the public thinks of us and how well we are managing the current events which have so much to do with their future dental welfare?

If these are critical times in our collective professional lives, isn't it about time we try to assess what the public thinks of us? The Board of Regents of the American College of Dentists thought so and today's program is the result. It seems the time is right to examine our public image. While this self-examination is important, the next steps, if we are found wanting, are even more important.

To take the first things first, three eminent individuals have been invited to examine us and to make a diagnosis. Hopefully, each will suggest a treatment procedure and, perhaps, a cure, if one is needed. Each speaker is a specialist in his own field and will be looking at us with the eyes that represent a special kind of consumer group which he exemplifies.
Lessons for Dentistry From Higher Education

JOHN S. MILLIS
President, Western Reserve University
Cleveland, Ohio

I have been invited to contribute to this discussion of the "image" of dentistry as seen from the point of an educator who has had some small experience with both professional and non-professional education at the university level. Dr. Pelton has suggested that we stop using the word "image" and take the word "profile." I agree that this is a helpful suggestion since each of us views a particular scene from a very personal point of view and what we see is rarely the whole but rather just a profile of the object or scene from a specific and unilateral line of sight. It is much the same situation as a man being viewed from the four points of the compass by four observers. Each observer would see essentially a profile and each profile would be different from each of the others.

Having admitted that my view must be a very partial one and thereby biased, I hasten to claim nevertheless that the educational profile is an important one. Much of the concept which the layman has about any profession is based upon his impression of the quality and the nature of the education and training through which the members of the profession have gone. Certainly society views with the greatest respect those professionals who have successfully passed through a demanding, an extensive, and a competitive educational discipline. Unfortunately, all too frequently the qualities of "demanding" and that of "competitive" are measured in quantitative rather than in qualitative terms. People tend to think that the length of education is the only measure of its rigorousness. Secondly, there is a direct relationship between education for professional practice and the practice itself. In general, people do what they have been trained to do. Thus even the practice of dentistry can be in large part forecast or explained by viewing dental education.

I take it that we are all agreed that those who enter the practice of dentistry shall have a university education and training. To say it
another way, dentistry is a learned profession and those who practice it should be learned men and women. From this presupposition we must conceive dental education as higher education. In fact, because we award the degree of "doctor" it must be highest education for we have no degree to recognize any level of educational achievement above it. This being the case, we may develop some informative insights by comparing the present scene in higher education in general to the present scene in professional education in general and in dental education in particular. Higher education is not static but rather it is highly dynamic. The institution of higher education is both the creature and the servant of society. As that society changes, higher education modifies, changes and adapts. Thus one can describe the present educational scene by pointing out the changes and modifications which are particularly prominent at the moment.

In the areas of higher and highest education there are six developments that I would like to mention. After discussing them I shall attempt to describe graduate professional education in relation to these criteria and thereby to render a profile.

1. If one chooses the oversimplified definition of education as the equation: education equals the sum of learning and of being taught, one can describe the assumed level of maturity of the student and the sophistication of the educational process by the relative emphasis upon the two parts of the righthand side of the equation. This is to say that the less mature the student, the more he is taught and the less he is expected to learn upon his own; the more mature the student, the less he is taught and the more he is expected to learn on his own. At the point that the individual passes from dependent student to independent scholar, his continuing education is wholly learning. Thus the past several decades have witnessed a great increase in the opportunities for independent study. Most undergraduate colleges provide honors programs or tutorial programs to replace courses. The seminar is being used in place of the lecture and the formal recitation. The term paper and the thesis have begun to replace the final examination. In the graduate schools, fewer course requirements are made, there are more seminars, and a much more universal use of research as a learning tool. In short, higher education is marked by a rapidly increasing expectation of independence on the part of the student, fewer requirements, more electives, more active participation, less passive being instructed.
2. One of the most interesting responses to the pressure of a proliferating amount of knowledge is the phenomenon of new groupings of the new knowledge with pieces of the old. I am reminded of such recently coined terms as biophysics, geomagnetism, geochemistry, paleobotany, radiochemistry, radioastronomy, social psychology, etc., etc. The old and familiar classifications of knowledge appear to be no longer as useful as they once were. The boundary of a single field is a shifting line, or perhaps there is no line. The important point is that new groupings and regroupings of the pieces of knowledge and interrelationships do produce new insights and clearer understanding. The development of biophysics has enriched both biology and physics and is leading to the solution of problems that neither parent discipline could solve alone.

3. A new value is being placed upon research as a tool of learning and, in fact, of teaching. Research is commonly thought of as apart from education. We have expressed an assumed dichotomy in our frequent use of the expression “teaching and research.” But research is not only the process of discovering new knowledge, it is also one of the alternative methods of learning and teaching and, in a real sense, is an alternative to the lecture, the recitation, or the laboratory. We see research being used as a learning tool for undergraduates, even those at the freshman and sophomore levels. We see increased reliance upon research as the means of learning in our graduate schools. The newest layer of highest education, the post-doctoral fellowship, is an educational process depending almost exclusively upon research as the learning tool. One might summarize these observations by saying that research as a learning device has become the hallmark of the educational experience of the mature student and of the sophisticated discipline.

4. As a direct consequence of point 2 above, there is a rapid development of the concept which I choose to call “polyvalency.” As new knowledge melds with old knowledge, new educational objectives appear. It is easy to characterize these as the appearance of a new field of knowledge or a new profession. For example, we can describe biophysics as a new discipline and the biophysicist as a new professional. On the other hand, biophysics is both physics and biology and the biophysicist is both biologist and physicist. He is equally at home in physics and in biology and he may work collaboratively with others from any of a large number of areas, both in the
biological and the physical sciences. But the most important point is that he is polyvalent. He is a specialist in more than one specialty. He is a master of several sets of knowledge and he is equipped with several sets of skills. He cannot be accurately described as a "generalist"; nevertheless he does not fit the familiar designation of "specialist." This is new development in higher education and is definite reversal to the trends which have run for the last four or five decades.

5. As knowledge has proliferated, it has become necessary to face the question of how much time and effort shall be devoted to developing the technical skills of the student. The decision has been made to so organize the instruction and the laboratory arrangements to provide technical assistance by moderately-trained technicians so that the student may concentrate upon the substance of learning and research rather than upon the mechanics. Let me illustrate this point by contrasting my own days as a student of physics with those of a present day student in the same field. As a graduate student I was responsible for the entire operation of my instrument, a 21-foot Rowland grating spectrograph. I learned glass blowing to build my own three-stage mercury vapor vacuum pump. I machined my own electrodes. I sensitized photographic plates for infra-red photography, took the pictures, and developed the plates. I made my own calculations on a hand-operated calculating machine or on a slide rule. In short, I became reasonably skilled in a number of technical procedures. In contrast, today's student of physics may well be working with a cyclotron which cost ten million dollars and five years to build. It is operated by a team of engineers and technicians who have only one function—the continued operation of the instrument. He has at his command the services of a professional glass blower, an instrument maker, and a machinist. His calculations will be made by an electronic computer, operated by and serviced by a team of highly-skilled technicians and professionals.

What I am trying to say is that the graduate education of many of the professionals in the university has required the creation of sub-professionals and, in fact, of new professions. The work to be performed by the products of higher education has to be subdivided and a part of it assigned to others so that the most highly-educated may be free to deal with the most sophisticated and mature areas of
knowledge and skill. It may not be too great an oversimplification to say that knowledge has been chosen over technical skill.

6. The explosive growth in the amount of knowledge has forced higher education to conclude that it is absolutely impossible to give a student the whole of knowledge even in one single discipline. Therefore, emphasis is more and more placed upon “how” to learn rather than attempting to get total coverage of an area. The assumption has had to be made that the process of learning must be a life-long occupation. Thus the skills of learning are given the highest priority. Again, I remind you that research is the learning tool best suited to the task of continued learning.

Now I turn to the analysis of dental education by examining its form and procedures on the same six points. What I have to say about dental education could be said about any professional education without particular change. It could certainly be said about all health professions. However, our subject is dental education and I shall confine myself thereto.

1. As far as I have been able to observe, dental education places great emphasis upon teaching in the educational process. The curriculum is totally prescribed, the student’s time is fully scheduled, library usage is frequently limited to textbooks and standard reference works and a limited number of journals. I think it fair to say that the dental student is not expected nor encouraged to be independent. His success is measured largely by his conformance to assignment and requirement. Initiative and originality are not too frequently encouraged. Since more and more students come to graduate and professional schools from undergraduate colleges which provide their students with honors programs, seminars, and tutorial instruction, they may well feel that they are treated as less mature individuals in professional school rather than, as most expect, as more mature individuals. I heard one student, not in dentistry, say that he felt sometimes that he was back in high school because he was less independent than he had been since that period of his education.

2. Dental education is characterized by a substantial fragmentation and rigid departmentalization. There is the obvious and sharp division between the pre-clinical sciences and the clinical subjects. This demarcation has many aspects. The courses of the two divisions
are presented by teachers of distinctly different backgrounds. The two sets of courses are taught at distinctly different periods of the student's educational experience. In many schools the two kinds of instruction are offered in different physical locations. Within the two principal areas of instruction, the material is prescribed within a specific department or course framework. The student's learning proceeds by quanta of knowledge and with the assumption that he (the student) will provide all the needed integration and relationships from course to course and year to year. As far as I know, there have been no attempts to make new arrangements of knowledge or to assemble pieces of knowledge in new relationships and combinations.

3. I am pleased to see that in some dental schools in which a research effort is developing that students have an opportunity to participate during the summer period. Thus, in the future there will be some dentists with an acquaintance with the process by which knowledge is advanced. However, it is my impression that this is in programs separately organized and not integrated into the teaching program. It is affecting only a minority of the students and is scheduled as an extra activity rather than being an integral part of learning at an advanced and mature level.

4. Whereas in the graduate school we see efforts to reverse the trend toward super-specialization, I have not observed this trend in dental education. Rather there continues the trend toward greater specialization or, in my words, toward more monovalency. I believe that the profession needs more scientist-clinicians—men who bridge more skillfully the gap between theory and practice, men so rooted in science that they constantly improve the quality of practice.

5. The dental profession is slow to adopt technical assistance. The dentist does not readily delegate tasks of medium and low skill to his less well-educated colleagues. As a consequence he is working much of the time at a level substantially beneath his true skill and competence. Dental education has not as yet wholeheartedly adopted the technical assistant philosophy so that the graduate is prepared and conditioned to practice this way. The result is that in the face of a rapidly increasing body of both scientific and clinical knowledge, our dental faculties find it impossible to provide room in an already tight curriculum for new material. It may be possible that if the technical help can be provided by others, the dentist in training
might have increased opportunity for a richer professional education and thus as a practitioner be able to give better dental care to more patients with an efficiency that results in lower costs.

6. Dentistry has developed a rather substantial program of graduate and postgraduate education. However, it is an extension of the familiar undergraduate dental education into the dental specialties on the one hand or the up-dating of dental skills in light of newer knowledge or clinical advances. It seems to me to lack the quality of greater depth and of advancing sophistication and maturity. Its focus is on "what to know" rather than the "how to know." That is, it adds to the dentist's training, which is necessary, but does not add particularly to his education. The means of these programs are like our undergraduate means, namely more teaching and not necessarily more learning.

I do not know that I have added much to a profile of dentistry. I certainly have not provided one. However, I trust that I have indicated that dental education, as is the case with most all of professional education, is not responding to the forces of change in the same manner as are other elements of the university and particularly the other elements which deal with graduate students. Perhaps I would not be too blunt to say that dental education is responding to change very slowly or not at all. Yet I am sure that members of the practicing profession and the faculties of our dental schools are aware of the forces which are actively at work in our society. They are in the midst of an explosion of knowledge; they are aware that new knowledge from research will make it possible in the future for the dentist to practice a preventive health skill and art rather than devote his time exclusively to repair and restoration; they know that we are not providing dental health care to all who need it; they know that the profession is not attracting its needed share of the gifted in the youthful generation. What we may not know, or perhaps better expressed, what we may not admit, is that education is a dynamic and not a static process, continually beset by changes and ever requiring adjustment, change, and improvement.

I am optimistic about the future of dentistry because I am optimistic about the future of dental education. The fact that you are met here to think and talk about the image, or rather the profile, of dentistry, that you have invited a layman to join you, shows conclu-
sively that you are concerned and seeking ways to strengthen and to improve that profile. I am grateful for this opportunity and only hope that my remarks may have turned your attention to how other fields of knowledge and skill are solving the problems which beset all of us. It may be that in the contemplation of other parts of the world of higher education there are examples to be followed, ideas to be adapted to dentistry, educational techniques which have been proven as useful. I have a strong suspicion that there are lessons for dentistry from higher education.

AND ANOTHER EDITOR SPEAKS OUT . . .

Gentlemen you are in trouble—not as serious trouble as the medical profession has found itself in recent years, but trouble, nevertheless. I rather suspect that you suspect you're in trouble or this first seminar on public relations would not have been scheduled.

You're in trouble because no one knows you—and, when the chips are down, no one is going to care whether you sink or swim.

Sometime, during this seminar, you probably have been told that one of the functions of public relations is to prevent fires, not put them out. I wouldn’t say you’ve got a fire going yet, but the kindling and spark are present and ready to go.

Now if I were a dentist interested in heading off government-provided dentistry (and don’t think for a moment the subject hasn’t been discussed along with Medicare—and don’t think the supporters of Medicare intend to limit the program to oldsters) my strategy would be to present my shiniest face to the public—to show the public what solid citizens I and my dentist colleagues are—to show the voter (and he’s the one who’s finally going to decide the issue) that I’m genuinely interested in his and the community's welfare, that I’m interested in more than filling cavities and bank accounts.

But you have not and you are not.

So far as the public is concerned, you all could be members of Anonymous Anonymous.—Glen A. Boissonneault, J.A.D.A. 66:305, March 1963. From “A Newspaperman Looks at the Dentist’s Image.”
An Editor Looks at Dentists

MARTIN S. HAYDEN
Editor, The Detroit News
Detroit, Michigan

The chairman of your program committee deserves a commendation for courage, if for nothing else. He who chooses to invite an editor, a college president, and a labor union official to speak on the same panel is truly one who would venture to shave the lion in his den.

Each of our professions is noteworthy for an interest in talking. Each is confident of its capacity to solve all the world's problems. Each loves the role of critic, the sensationalism of simple words calculated to raise hackles—and blood pressures.

And of course, when you go farther and ask an editor to come before you, look you over and report bluntly on your image—then you must indeed be dedicated.

OK, I'm an editor; I'm looking at you:

You are a pleasant sight. Even if I did not know who you were, I would know by your dress, your manners, by your conversations, by the handsomeness of your wives, that you are a group representative of the best America has to offer, that you have reached goals status seekers strive for, that you are the kind of people from whom are drawn the individuals capable of making a society, or a community—click.

That's a round-about, editorial way of saying that you are a nice-looking crowd of people, that I'd like to have my sons grow up to be men of the substance that you exude.

But that's too superficial—it does not concern the image of the "dentist," which is what I was invited here to discuss, and it is more complex.

I received your invitation some weeks ago, accepted because it looked like it would be fun and then, as usual, delayed doing anything about a prepared text until the deadline approached. Then I started my research and came to a startling, and disconcerting conclusion. I discovered, or at least reached a personal conclusion of my own, that there is no clear image of the American dentist in the public mind.
I hasten to add that most medium and upper income people have a good picture of their own individual dentist. He is a trained man whose professional competence is beyond their question; if it were otherwise, the patient would look to someone else.

To most of us laymen, our own individual dentist is, in addition, a pleasant soul who discusses baseball, politics, outdoor cooking, golf, fishing, or the problems of child rearing in a diverting monologue while we grunt, gasp, and expectorate. We see him every three or six months, feel much better for our hour or so under his care or that of his hygienist and then, unfortunately, neither see or hear of him again until it’s time for the next visit.

In short, our image is that of one individual, trusted man—not of the whole profession of which he is our personification.

You get an example of what I mean in the periodic public opinion polls in which unsuspecting folk are suddenly asked to list various occupations in the order of their admiration for them, or perhaps the order in which they would pick them as desired occupations for their children.

Physicians continue to rank high in such listings along, in this day, with nuclear physicists and chemists. College professors and presidents are high. Bankers and lawyers do not do too badly. Newspaper editors generally make the bottom of the list along with airline pilots, preachers, politicians, and stock brokers.

But dentists all too often do not make the list at all. It leads one to speculation as to whether anyone—except a dentist—ever dreamed of the day when his foundling son would, all by himself, take drill in hand and assault a decayed bicuspid.

Why is it so?

There is a perhaps superficial reason based on lack of romance—a lack of drama in the dental profession.

Medical men, for example, have their Drs. Kildare and Casey thrilling TV audiences once a week. The nearest dentists can get is in the commercial that shows a happy little moppet dashing into a kitchen to report, “Look, Ma—no cavities.” And she, so help me, is giving the credit to a toothpaste—not to the dentist who has just given her the good news.

Whoever saw a show stopped in mid-performance as the stage was taken over by a harried man asking: “Is there a dentist in the house?”
I cannot think of a hero of song or fiction who came from the dental profession. No, physicians get all those breaks. We constantly read of the heroine who falls in love with her surgeon or, more often, her psychiatrist. But whoever read of the beautiful blond victim, her cheeks packed with cotton wads, looking up at the mirrored profile of the dentist driving her new inlay into place and murmuring: "This is the man whose hands I want in my mouth for evermore."

No, you just haven’t any luck in that direction. I am afraid you can’t do anything about the fact that, at least in the movies, the written novel, and the TV play, romance and dentistry just do not mix.

I do think, however, that there are some other things which blur the dentistry image about which you can do something.

Again, I really wasn’t aware of them until I got this assignment to analyze and report to you on how you look to the general public. As editors do, I called on our Medical Writer for whatever he had available that might help me. He came up with a number of pamphlets and documents, journals and bulletins. The articles broke down into two classifications, both of them beyond me.

In the one class were such titles as "Case History of the Ossifying Fibroid Epulis" or, a short abstract on "Silicate Cements in Class III Cavities." These were beyond my technical understanding but, thumbing through the journals, I found the articles reassuring as indicators that dentists keep on learning after they leave the formal classrooms.

The other classification of items was completely understandable to me as a layman but beyond the conception of an editor raised and bred with an understanding of and respect for public relations and public opinion. These were the articles in which various dental colleagues, bankers, business managers and consumer researchers told dentists how to make more money out of the practice of dentistry.

Believe me, gentlemen, I favor the profit motive. I abhor the thought of socialized medicine. I firmly believe that the profession of dentistry is one in which the years of training, the cost of education, and the value of acquired skills justify earnings far beyond those of other less-prepared men. In short, I approve of dentists being in the income class which justifies the purchase of a Cadillac.

But do you have to be so crass about it? Let me give you a few examples of what I mean:
One periodical delivered to me contained the minutes of a meeting of a so-called Payment Plan Commission, apparently established to formalize installment payment financing of dental bills.

An item on the agenda was a discussion of the question of whether or not 8 per cent interest was and I quote, "a drawback to potential users of the plan." Mind you, the talk did not revolve around the matter of whether equity or decency suggested more modest interest charges. The concern was whether the loading charges were so big that they might scare off some of the customers. The discussion ended with a motion that the matter be referred back to the bank through which the financing was written.

There also was a discussion of a new credit form which the Plan recommended to participating dentists. Some instructions for its use were included. Among them were directives to always use the "gross amount"—i.e. cost of the dental care plus the finance charges—in all forms and in all discussions with the patient. Under no circumstances, it was specified, should the dentist reveal to the patient how and when he received his payment from the financing bank, how much from the patient's payment went into a reserve to cover delinquency on other accounts, or the exact interest the patient was paying.

I submit, gentlemen, that, despite the success of such a hard-boiled credit approach in certain cut-rate furniture houses, there is something wrong in its identical employment by a group which boasts of its professional status, of its interest in man's welfare.

And there were other examples: In one journal, under the heading "Report From the Ethics Committee," a dentist wrote that the great bulk of complaints to the committee came from patients dissatisfied with dentures. At one point, he said: "It is natural that dentists enjoy making dentures. It is both challenging and remunerative." A lay reader might have wished that he had added some item indicative of the possible value and/or convenience of the patient. But that is perhaps a trivial complaint. More to be criticized, it seemed to me, was the concluding sentence of his little denture essay in which he said: "It is most desirable to be able to create good dentures and get along with people but, of the two, it is better to get along with people."

Is that what dental schools teach, and what dentists believe? I would hate to think so—but it is the exact quote of one dentist advising his colleagues on the road to success in your profession.
Actually, as I read through the journals, it seemed to me that the quality of dental care was very frequently subordinated to the question of the merchandising of that care.

I found such titles as:

"Case Presentation and Motivation of Patients to Gain Acceptance."

"Success Patterns in Dental Office Routines."

"Wheel of Fortune—Your Appointment Book."

"Increased Efficiency in Practice Management."

"The Fee Problem in Operative Dentistry."

I sympathize with the importance of such discussions, but somehow, and perhaps only to a layman exposed suddenly to your journals, the top billing given the subjects suggested that they were the most exciting offerings of the various meetings and conventions—that the technical talks by college professors were admittedly pretty dull stuff.

One article dealing with the problem of fees, in essence, suggested to the beginning practitioner that he start out with whatever he regarded as a fair fee structure; the advice continued that, when his practice grew so large as to be burdensome, he should trim it by raising fees. One wonders how far above fairness the personable and successful practitioner might go.

As a writer of editorials, I read all the journal editorials with interest. Many of them showed a degree of discursive capacity suggestive that the writers well might have chosen journalism as a life work.

One particularly good one dealt with the problem of whether there is, or is not, a "dentist shortage." The writer objected bitterly to the approach which proved existence of a shortage of dentists by the fact that somewhere between 40 and 50 per cent of the population get no dental care at all. (The figures, I might say, were those of the writer of the editorial.)

He went on to build a thesis on the indisputable facts that many families had no automobiles; that others had only one car, but two drivers; that hundreds of homes had only one television set for several viewers; that thousands of homes lacked as much as one electric blanket.

Yet, he concluded, auto manufacturers, and TV and electric blanket makers, were neither running 24-hours a day to make up for the lack, or being subjected to Federal inquiry as a result of the "short-
ages.” The gentleman was so logical that a dubious reader shook his head trying to figure what was wrong with this argument that concluded with the statement that the half of the population that either didn’t need or want, or couldn’t afford dental care, wouldn’t be helped if there were twice as many dentists.

As I say, it was almost logical. But, as a layman, I would have liked to have seen, somewhere, some concern expressed for all those people who either don’t want, or don’t have the means to get that good dental care which I have been propagandized to believe is so important to physical well-being. And somehow, I’d have liked to have had the writer accommodate his approach to the fact that the journals carry continuing calls from small towns reporting an “urgent need” for a dentist.

This is the sort of thing that troubles a thoughtful and friendly layman as he hears dentists following physicians in their opposition to any and all aid programs that might help young men get the kind of educations that today’s practitioners generally acquired in an era when costs were lower and tax bites on parents less painful.

Again, I want to emphasize that I am basically sincere in my devotion to the good old theory of doctor-patient relationship sustained by free choice on the patient’s part. But sometimes I find that you gentlemen bruise in practice that relationship which is so definitely the keystone of your approach to your profession.

Let me give you an example from my own experience:

When I was in Washington as a newspaperman, I had a dentist whom I both admired as a professional and liked as a personal friend. My stays in his office were always long, not so much because of the condition of my teeth as because we had so many things to discuss, including—inevitably—the question of what socialized medicine, or dentistry, would do to the happy relationship between patient and doctor. Then came the day when my friend decided I had better have a wisdom tooth removed.

Naturally, I went to the extractionist of his selection, one of the best, I am sure, in the District of Columbia. I made a telephone appointment with a young lady who instructed me to be there at ten minutes to nine—no later. I arrived in a waiting room where a half dozen others were already seated.

Promptly on the hour a nurse appeared with a list:

“Mr. Jones, Room Number one . . .
"Miss Smith, Number two . . .
"Mr. Brown, Number three . . ."
Finally, "Mr. Hayden, Number four."
I went down a hall, found my room, was told by a nurse to hang my coat on a hook by the door, roll up my left sleeve, and climb into the chair. She fastened to the viewer an x-ray which, I later concluded, was the one my dentist had sent over.

The nurse and I chatted for a moment. A man appeared in the door.

Said he: "Good morning, Mr. Hayden . . ."

I started to say: "Good morning, doctor."

I'm not sure whether I got it all out or not because his entrance was a signal for the nurse to inject a shot of sodium pentothal.

Some undetermined number of minutes later, I woke up lying on a cot in a room across the hall. A maid came in with a cup of coffee and a suggestion that I drink it "when you feel well enough."

In due course, I sat up, drank the coffee and, as inveterate smokers will, lit a cigarette. Another nurse, a most formidable one, appeared to demand angrily if I didn't know that "you're in a surgery where people DO NOT smoke." I've thought since of several answers I should have made but, at that moment, none of them came to mind.

I just sipped my coffee, cleared the fuzz out of my brain and, in due course, made my way down the hall to an exit where a secretary waited with a typed bill for services rendered.

It was all as efficient as hell! The wisdom tooth was gone, the physical discomfort minimal. But I was left with a gnawing question: "What doctor-patient relationship?"

In all honesty, I wouldn't know if the doctor who removed my tooth were one of you gentlemen sitting in the front row. I never really saw him. Could government dentistry somehow be LESS impersonal?

In conclusion, I have just one more critical question: Where are the dentists when public problems are being met, and good works being done?

As an editor, I sit on a number of boards of charitable institutions, attend innumerable meetings at which pressing community problems are discussed, fought-over and, on rare occasions, alleviated. As I began to prepare my speech, it suddenly dawned on me how rarely I ever saw a dentist at any of these meetings. Physicians are there, and
of course lawyers, preachers, merchants, bankers, social workers, insurance salesmen, manufacturers, educators, labor leaders—everybody but dentists. Where are you on such occasions?

To me, in retrospect, this was particularly striking at several meetings which I attended and at which fluoridation was the subject. True there was usually dental profession representation—by a dental school dean or, sometimes, by the president, or a committee chairman representing the local dental society. But where were the dentists who should have been there as good and interested citizens fighting for something which they thoroughly know, and believe in? Somehow they were missing.

I've asked some of my dentist friends why dentists don’t really go to work on that issue, why they don’t circularize and propagandize their patients when a community gets torn apart by one of these recurrent fights over fluoridation. The answers I get are that: “That's become a political question . . . we're not politicians . . . we've got to keep our patients, and some of them are pretty upset by the anti-fluoridation propaganda.”

All those things may be true, gentlemen. But you live in, and are particularly benefited by, a free democratic society. It is a society and system that can live on only if it is nurtured and supported by the offerings of ALL its segments. The groups that get out of the kitchen whenever it gets hot, that turn up missing when public issues are fought out, and charitable campaigns inaugurated are the drones who just live off the system instead of contributing to it.

They also are the groups without an image, maybe—like dentists.

“Deserved or not, dentists have become known as a group who do nothing but practice dentistry. In the public eye they don't provide community leadership, they don’t support community activities with either time or money.” These are the words of a newspaper editor who was invited to describe the public image of the dentist . . . [his] article . . . makes interesting but painful reading and should stimulate us to consider the suggested solutions to a problem, which, if as prevalent as the author believes, is indeed serious.—Editorial, referring to a paper by Boissonneault, J.A.D.A. 66:387, March 1963.
A Consumer's Concept of the Image of Dentistry

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By precise definition and connotation any discussion of imagery must be subjective. You, therefore, have a need to know about this consumer's aspect of the subject assigned. In 1954, as the administrator of a labor-management health and welfare fund, I was charged with the responsibility of purchasing dental care. This was an outgrowth of a collective bargaining agreement between the International Longshoremen's and Warehousemen's Union and the Pacific Maritime Association—which set aside $750,000 for a pilot program for children's dental needs for one year. It was to cover children in all of the 34 port cities between Bellingham, Washington, and San Diego, California. Later a similar program was instituted in the state of Alaska, and in January of 1962 I was the consultant to the Hawaiian Employers' Council and the ILWU for setting up dental coverage for children in the longshore, pineapple, and sugar industries of Hawaii—now in effect. Hence I have dealt on a formal basis with six dental societies.

In California there are two state dental societies, one in the northern part of the state and one in the southern. Concurrently, as a result of this opportunity of purchasing dental care for large groups of children, I met with committees of dental societies concerned with prepayment programs in Michigan and Washington, D. C., and have had teaching contacts with dental students as a Guest Lecturer in the School of Dentistry at the University of California. I have dealt with closed panels, service corporations, and insurance carriers in the purchase of dental care, and even members of the College.

My charge was to "make the best medical care available to beneficiaries of the program, emphasizing prevention, in obtaining the most comprehensive coverage possible and removing financial barriers that keep people from seeking the medical care they need." Editorially my trustees also said "the best that modern medical science can provide is due the beneficiaries of any program designed. All of
this autobiographical material is necessary to alert this audience to the bias from which I speak. If I could summarize more succinctly those experiences, I would choose two quotes that underscore the motif: one from Jonathan Swift—"there is nothing in this world constant but inconstancy," and one from Osler—"the philosophies of one age become the absurdities of the next." "Age" here could be a month.

Perhaps it was no accident that the first person dealt with representing organized dentistry is presently a member of the Regents of the American College of Dentists, and hence an integral part of my first image. We noted then that among the objectives set forth by the College is "to improve public understanding and appreciation of oral health service," and it is within this setting that these remarks are being made.

Rather than a chronology of events, a more orderly outline is that derived from hindsight. The first experience of the "image" of dentists which is significant is what I learned from the dental students. These were senior dental students who within a month would be graduating. The subject of the lectures given was "Voluntary Prepayment Health Insurance in America Including Dentistry." From questionnaires given to the students after the lectures, tabulation shows that their greatest concern was with the following issues: would they retain freedom to practice under prepayment programs, wasn't this socialization? (Parenthetically, the definitions of socialization were as varied as the students.) Who was going to set their fees? There was not a single query or sign of interest on what would encourage persons to seek dental care, how could one be assured of good quality, what was their relationship to the other health professions, and what was their role as a professional person in the organization of dental service? When it was suggested by Dean Fleming and myself that there may be a need to encourage utilization of dental care, one dental student suggested that perhaps somebody ought to do for dentistry what "Arrowsmith" had done for medicine. These students today, two years later, are members of dental associations with whom a similar consumer would be meeting and would have the same problem of trying to get across the desire for expanding dental service to meet the unmet needs, which are fully documented. The concept of personnel shortages does not seem to be a prevalent one—even in the classroom.
There has been a slow growth in prepaid dental care throughout the nation compared with other types of health coverage with the possible exception of California. To be current on that State's progress, I quote from the San Francisco Chronicle of July 24, 1963.

California's pioneering in prepaid dental care is expanding rapidly, Dr. F. Gene Dixon, president of the State-wide dental organization administering the program, reported here yesterday.

The program, started by the dental profession more or less inadvertently in 1955 when the International Longshoremen's and Warehousemen's Union demanded it and offered to pay for it, has now grown to cover "about 425,000 people," Dr. Dixon said.

It was the first such program in the United States, he said, and got a tremendous boost when Aerojet-General Corp. brought in 114,000 employees recently. The company pays the bills as a fringe benefit.

The next big boost, Dr. Dixon and Dr. D. F. Pridgen of the California Dental Association reported, will be the addition of "potentially, 125,000 more people" through Teamsters Union contract in the Los Angeles area during the next two years.

Two Teamster groups already are in the program, and two dozen other groups are expected to be added as they negotiate work contracts which include the dental care.

Of the 425,000 persons now covered by the new plan in California, 200,000 were brought in as members of labor unions receiving the service as part of employment benefits. The 225,000 others are covered by the plan because they are receiving public assistance (welfare).

Costs average about $10 per month per family, and most of the plans cover 80 per cent of dental bills. The worker pays the first 20 per cent of his dentist's bill himself, Dr. Dixon explained.

National figures indicate, according to Dr. Galagan of the Public Health Service, that there has been an increase, both in the number of persons covered, and in the number of plans. For example, in 1960, some 550,000 had coverage under dental prepayment plans, compared with more than 1,145,000 today. Over the same period, the number of plans has more than doubled from 128 to 296. He pointed out there has also been a marked tendency for plans to provide wider range of benefits than some of the earlier ones. Still this relatively slow growth is perhaps in part due to the lack of pushing dental care as an integral part of total health needs. The concept of "waiting" for the toothache ought to be as outmoded as a Model T auto.

If words really represent constructive or negative thinking, the phrase frequently reiterated at the initiation of the ILWU-PMA Program was that the "fringe benefit" barrier has been broken to include dental care. Apparently the usual understanding was that
fringe benefits include only part of health benefits and pensions. It is no accident, I submit, that dental care, even in the minds of the dental profession, was considered not quite a part of medical care.

The first indirect reaction we got from organized dentistry was how do you stop a consumer from this high handed method of desiring to buy dental care without even asking the profession. The dental profession said that it was not organized in any manner to provide the service on a prepayment basis.

On second thought, they were faced with the reality that only dentistry could provide dental care—not dollars, not desire alone. The money was in the “till” in this instance and so organization of various types soon followed. This included insurance carriers who never before considered dentistry an “insurable” risk.

But only four years later were we able to work out arrangements where there would be inter-referrals with physicians by dentists and the use of hospital beds when necessary. To underscore the lag of training, I should like to quote an August, 1963, headline from the same state where “phenomenal progress” has been made, “A Unique Dentistry School”; the first paragraph of the story reads as follows:

California’s first internship-residency program in pedodontics, or dentistry for children, has been established at Children’s Hospital of the East Bay in Oakland.

Another approach which I call “purist,” set forth by organized dentistry, was that unless organized consumers could have total care, no care would fit into professional standards. Here, as each of us individual consumers know, if we cannot afford total medical care we purchase that which we can. While the Health Insurance Council told us that in 1962, 76 per cent of the U. S. civilian population was protected by some form of voluntary health insurance; nevertheless, only about 28 per cent of our individual health care costs are covered by prepayment. Still, voluntary prepayment grows.

Since July of 1960, the Nation’s largest employer, the Federal Government, instituted partial payment for health care. Just three years later, in response to the President’s message and national education and concern, all the carriers involved under the Federal Program are attempting some method, albeit limited, to provide coverage for mental illness. Certainly all of the same limitations are relevant—the expense, the unknown needs, lack of manpower, limited actuarial knowledge, changes in treatment. And still some benefits are being
provided for over 6 million Federal employees and their families and many more varied benefits, beginning November 1, 1963, in the area of mental illness.

Is it illogical for a consumer to assume that some dental care is better than none at all? Is this a truly professional attitude with all the implications and responsibilities that derive from the concept of a profession? It seemed impossible in answering questions of students to illustrate the interdependence of the purchaser of dental care, who is also a taxpayer and in good part responsible for the edifice that housed the educational facility for the dental students, and the profession's responsibility. Eclectic thinking—a concern with total problems of health care and more broadly—the kind of democracy which has as one of its goals the preservation of natural resources and this includes people, seemed as alien and esoteric as discussing the History of Modern Art in a course on periodontal disease. There is no denial of the sincerity of the questions posed by both students and those in practice. The areas of omission are what is disturbing.

Rational men and women will derive images from reality in great part. What kind of student is being selected for the profession, what are the criteria used if we want to assure ourselves of individuals who are concerned with the total health needs of the individual, don't they have to have exposure to the other health disciplines? Don't they have to know something about the organization of total medical care and is it not important they not be amalgam-minded and their spectrum be limited to the oral cavity? All of the studies on comprehensive care vis-a-vis limited coverage indicate that given options of care, more consumers will pick the more comprehensive care. Isn't it imperative that the educational processes make the dental student fit into the health services in not a second class citizen position? Just as dentistry has progressed from focal infection to fluoridation doesn't that horizon have to be broadened to include socio-economic factors which seem to be the most critical variable that produces motivation to secure medical care. By conviction I cannot divide dental care from medical care. It is the mind of at least this consumer an integral part of medical care and one cannot be a little bit sick.

Leaving the arena of the student setting, the dental society committees assigned to discuss prepayment spent literally hours with this consumer on the following subject: group practice versus individual
practice. This was never an issue in the mind of this consumer because we had been so impressed by the overwhelming data about the shortage of dentists and the real problem of distribution of dentists. It seemed that a tremendous amount of adrenalin was being secreted against a strawman issue which would not give better dental care or necessarily less satisfactory dental care, nor would consumer groups feel that this philosophic issue had to be resolved before care could be initiated. (There were insufficient dentists, for instance, in Alaska, and in a couple of islands of Hawaii, and parts of the mainland.) Interestingly enough the Public Health Service Study in 1959 of the ILWU-PMA program done five years after its inception, indicated very clearly that the cost per patient was lower in the dental service corporations while utilization in group practice plans was higher. Two independent studies which were supported by the American College of Dentists and reported in the September 1958 issue of your *Journal* showed similarly high levels of satisfaction by both the dentists and the individual consumers regardless of “open” or “closed” panels. Most important was a summary statement which reads in part as follows:

> After four years of operation, it can be said without question, that these children have excellent dental care, probably the most complete of any group of their age.

> The reports indicate the degree of satisfaction with some indications of why patients and participating dentists feel as they do. . . . Careful study of all phases of each report should be most helpful to all who are concerned about the future of dental practice.

The second issue was what to do about the various ethnic groups to be covered—how could the dental profession assure the consumer that their membership would take people regardless of race? It would be an understatement to say this issue was loaded. Actually in one state where we were told by leaders of the profession this would present a problem, the individual dentists by postcard response showed that the majority of them agreed to take people regardless of race. Even in Hawaii where the stratification of ethnic origin goes deep into the entire population this has not proved the “bugaboo” indicated by the spokesmen for the profession.

The third great fear, and fear is used considerably, was what would be the effect on the patient-dentist relationship. It was difficult to convey the concept that who paid the bill was not necessarily an integral part of the patient-dentist relationship and many studies have so indicated. Parenthetically, I should like to add the reason
there have been so many studies on this program is that it was a "pilot" with many different methods of prepayment involved. We started with the concept there was no single answer under our voluntary system. Methodology would have to prove which was best. If the mark of the truly educated is to learn from others and not necessarily go through the expensive and tortuous trial and error system, then certainly the American Dental Association, the Public Health Service, and the American College of Dentists have contributed enormously to the consuming public of dental care in many aspects which should make the word "pilot" obsolete in the concept of budgeting dental care. These studies should save other consumer groups thousands of dollars.

Another great concern expressed was, "What about the fee schedules?" When it was suggested that the setting of fees was properly in the province of the profession and that only when the profession priced itself out of the market and we could no longer avail ourselves of the service, would this be a real problem, the incredulity of the profession to this approach was beyond any articulate description. We simply asked to be notified but not have any hand, direct or indirect, in setting fees. We did ask for limitation on administrative costs—only because of a "singeing" many of us received from our experience in other phases of medical care.

This consumer sat through a conference where dentists were discussing relative value fee schedules and entertaining the possibility of spending $75,000 for such a study concurrently with a $500 budget for dental education. This was a byproduct which did not enhance the image of dentistry. I have emphasized in the minds of some the fact that dentistry is relatively new in the field of health disciplines and certainly newer in the field of prepayment. Quoting the late Dr. Hodges, who was president of California Physicians' Service:

Prepayment plans are established to facilitate payment for medical service, not to cheapen its quality. . . . If dentistry, medicine's allied profession, wishes to explore the possibilities of a prepayment dental care program, there is a wealth of experience, gleaned by medicine, available for guidance. Dentistry can follow the pathway which medicine has had to cut through the jungles of inexperience. Indeed, dentistry may even be saved from making some of medicine's outlandish excursions into impassable territory.

I am not suggesting it has all been on the negative side and that you have made all of the same errors. There is one action, however, that looms vividly on the horizon which concerns me greatly. It al-
most seems illogical when one reconstructs the concept of "who sets the fee." This concern one cannot deplore in its entirety; it is a reality of life. What one can deplore is that if one turns over the future of dental care to insurance companies which are primarily mechanisms of payment by their own definition, who then set the fees? I think colleagues in the medical profession will tell you that in the early days of prepayment, the surgeons did better than the internists and that pretty soon, medical practice began to follow fee schedules rather than independent judgments by the very nature of the economics.

All of the discussions in the field of over-utilization of hospital facilities certainly bear this out—the unnecessary hospitalization for diagnostic work-ups, and the like. Moreover, I submit that only peers can judge the quality of work of others. Here I think the dental profession has shown considerably more maturity than the medical profession and has been willing in most of its contracts to insure quality controls. There has been little if any reluctance; moreover, hearty acceptance in some quarters fosters quality checks by screening dentists and other criteria established by the profession. Is this the role of an insurance company? Since a basic concept of insurance is that the house shall not burn down, is this analogous with dental needs? The risk factor in dentistry then is really not a true one. Since I have learned from you that most of us are dentally ill and all of us need dental care for prevention of dental diseases, it seems inherent, in logical sequence that people be treated on this basis. The concept of "catastrophy" has no place in the profession of dental care.

The image of the profession in the minds of those who are interested in purchasing dental care took a nose-dive when the American Dental Association's own office purchased dental care through an insurance company. Several deductions might be made—was there a lack of imagination and know-how on the part of the dentists to self-regulate themselves? Were they less imaginative than insurance companies who have every reason for being but whose real role is not necessarily improving the quality of care in any of the health fields. Their chief role has been—and justifiably so—a mechanism of payment. Since they are in existence primarily for profit as against the articulated role of the profession, shouldn't the actual dollar for dental care go to the profession for more dental care rather than insurance taxes, retention and other overhead. I must eliminate the "risk"
factor since none of the policies written have much of a “risk” factor involved.

The last major problem that concerns us is the utilization of dental care. Here again this is hardly the role of an insurance carrier to promote. There is obviously, from the National Health Survey statistics, a wide discrepancy between need and use. For reasons other than dollar deterrents that are known to all of you, persons do not seek dental care. Is it not then the role of the profession as part of the total community to be in the forefront of using every device and inventing new ones in translating the unmet needs into demands? Should the consumer be the catalyst? The following little poem that appeared in a paper by Dr. Willard C. Fleming seems apropos:

Little Bo-peep has lost her sheep
And Univac computer has failed to find them,
But, they will meet face to face
In fourth dimensional space,
Preceding their leaders behind them.

I think there is a double entendre involved in the last line which has to do with raising the question of who are the leaders.

Another concern that is necessary and appears lacking in anything I have heard raised by senior medical students and minimally raised within the practicing profession is the whole role of research. On this subject Dr. S. J. Kreshover of the National Institute of Dental Research wrote as follows:

There are no short cuts to professionalism in research. The road is hard, and my regard is boundless for the few dedicated and sacrificing dentists who join the ranks of researchers each year. . . . Let us sell our kind of dental research and perpetuate an image in keeping with our heritage of scientific excellence and our broadened responsibilities of today and tomorrow.

A succinctly summarization of “image” concept as I see it was made by the Editor of the Saginaw News who said:

This collective image is made up of the individual reflections of everyone of you . . . if you are going to have the collective image you desire you are going to have to be individual citizens of your community as well as members of active professional groups.

This did not indicate what kind of citizens or what kind of members of professional groups. I am suggesting that it is necessary that you assume leadership in education, research, and integration with
changing times. For a timely example—we read about automation. It does affect dentistry; obviously I am not qualified to speak on the effectiveness of high speed drills—I am not talking about that kind of automation. I am talking about that kind which is changing our total American scene from large numbers of blue collar workers to larger numbers of white collar workers who cannot by the very nature of their work be edentulous.

I have indicated at this time the demand has come primarily from the consumer. It must be stimulated—yes, even reinforced—by the dentist and his practice must reflect his membership in the total health team. He must be knowledgeable in current research in his field and have an awareness of the literature so that we do not find studies containing tables about a number of dentists who disagreed with the Survey of Dentistry was greater than the number who had read it. Insofar as possible, I am suggesting that the reality of behavior will create the image—not what you say but what have you done in the past 24 hours as a member of a health profession.

(A list of the references noted in this paper may be found on page 304.)

NOTE ON JOURNAL PUBLICATION DATES

Beginning in 1964, the months in which the JOURNAL is published will be changed. Instead of appearing in March, June, September, and December, the JOURNAL will be mailed to you in January, April, July, and October.
Continuing Education

On Sunday morning, October 13, 1963, at Atlantic City, the American College of Dentists presented a program that considered a number of approaches to “continuing education” in dentistry.

Should only the young continue to learn? What responsibility should be assumed by the university, the dental school, the dental organization, the State department of health? Where do the State Boards come into this picture? What should be the baselines in this continuing education effort? What should you do?

The five papers that follow answer these questions.

Shall Learning Be Restricted To the Young?

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Four months ago I had the good fortune to participate in an exploratory mission to the city of Cali and the fertile Cauca Valley in the nation of Colombia. In the course of the visit, our delegation was being shown one of the modern industrial plants in this rapidly growing metropolis. Rather than take the prearranged tour to see the machinery, the orderliness, and the end product of this manufacturing concern, I asked permission to choose at random three workers in the factory and visit with them about a variety of subjects. The three workers I chose seemed typical of all the employees. They were in their mid-30’s; they had relatively little education; they had young families; and they were earning between $1.50 and $2.00 per day.

I opened my questions by asking them to tell me what they most wanted in this world—what was it that stood at the top of their list of priorities. Without hesitation each of them in turn and in his own way said that he wanted more than anything else in the world a good
education for his children. He wanted them to have more learning than he had had because he recognized that education would provide the golden key which could unlock a happier future. We then talked about a variety of other matters—the Alliance for Progress, the political system of the area, their own working conditions, and finally I asked each of them to tell me what they would do if they should be presented with a gift of 100,000 pesos, which in our money would equal $10,000.

They asked for time to think and then reported, again unanimously, that they would use this new found wealth to guarantee the education of their children. This squared with their earlier commitment that more than anything else they wanted a good education for their sons and daughters. They were deeply concerned about this problem, and they asked me many questions about our own educational opportunities. I came away more convinced than ever that we here are indeed among the fortunate few. I came away convinced also that the candid responses of these three typical workers in a Latin American plant told me something of great importance to all of us. They sense that there is a better way than the one they now know. They are seeking approaches which will provide this improved route. There is underlying all this a sense of urgency, a realization that progress can and must occur rapidly in their society.

This incident in Colombia in itself may be insignificant, but this could be duplicated around the world. People everywhere are being made aware through our rapidly improved system of communication that there is a better world than the one which they know. There has been enough competition for their favors that the people in the underdeveloped countries of the world—and this means most of the people of the world—are living with a rising set of expectations. There is something better ahead and they know it. Furthermore, they sense that improved education is the real bridge to this new and better future. The eagerness to know—to learn—is universal.

We in the United States of America are a privileged people in many ways and our educational system is not the least of these privileges. We have the most complex and effective system of education of any nation in the world, a scheme which grew from the philosophy of our early founders. Schools were important in the thinking of the Pilgrims, and the enthusiasm grew, rather than diminished, as the nation prospered. Thomas Jefferson argued with conviction for an enlightened citizenry as the cornerstone upon which a sound de-
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Democracy could be built. It was during his period that the Northwest Ordinance was written to include the words, "Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." Nowhere else in the world has this admonition been so rigorously followed; nowhere else has there been such a highly organized learning environment as there has been in our own country, and it may well be that this is the real secret weapon of our nation's welfare.

Even so, there continues to be a feverish concern about the state of education. When the Soviet Union beat us into outer space, the panic button was pushed. And while the pressures are not nearly so great today from this count, there is, nevertheless, the stark realization of the role of brainpower in our new age. Questions are asked, speeches are made, theories are rehashed, teaching methods, teaching standards, facilities, curricular matters, educational philosophies all have been areas of concern for the past several years at every level of discussion.

In our earlier history, school problems were basically matters of local concern, but now the spotlight has shifted to Washington. It is no longer a question of whether there shall be federal aid to education—that question has been resolved. It is now simply a matter of how much aid and in what form. I have been told that in a recent session of Congress there were 83 separate bills introduced dealing with the issue of federal aid to education and that 23 of these were passed. At the same time, it was pointed out that 28 agencies of the federal government are involved in one form or another in educational matters.

The concern is legitimate. Every thinking citizen must know that we have no alternative to the full mobilization of our brainpower—be it in Mississippi, Alabama, New Mexico, Montana, or Michigan. Not only is this vital to the full development of human potential, but in this age where so much of our national security is related to our scientific developments, we must recognize that education has become an instrument of national policy.

True and important as all this is, I have observed through all this discussion about education that we talk almost exclusively about education at the elementary, the secondary, and the college level. This is where the arguments rage; this is where the positions are reached; these are the areas which battle for support from every available
source. Yet while all this is occurring, let me suggest to you in the words of my friend at New York University, Dean Paul McGhee, "There may well be an elephant in the tent of education, and that elephant is continuing or adult education."

We behave as though education were somehow the exclusive right of the young, that there is some kind of pre-ordained formula which calls for eight years in elementary school, plus four years in high school, plus four years or more in college, and then one's education is complete. We provide a kind of educational lockstep. At age six in school, at age twenty-one out of school—educated. To be sure, in some special cases, it may require a few extra years, but in any event, our widely adopted concept seems to spell out a clear and specific time for learning, to be followed by an equally clear and specific time for work. How foolish we are! Learning is not and cannot be so neatly compartmentalized. We are slowly realizing that education does not stop with formal schooling but that it is genuinely a lifelong process.

A slumbering giant is awakening in our educational community. The President's Commission on Education reveals that over 50 million people—almost one third of our population—are in some form of continued learning and that this figure grows rapidly. There is indeed an elephant in the tent!

The reasons for this intrusion into the tidy tent of formal education are good and sufficient. For the first time in the history of civilization, the time span of drastic cultural change has been compressed into less than the lifetime of an individual. We know now that our own generation faces the task of managing a culture different in kind than the one originally transmitted to us. The net result of this, stated in plain language, is that the well educated youth of yesterday is an obsolete man tomorrow.

From the point of view of the historian, the tide of human events rolls forward with an ever increasing swell. Yet for those of us caught up in the day to day affairs of managing a profession, a career, a home, we find it easy to be swept along with this tide without recognizing what is occurring around us. We can get some sense of this dramatic age of ours by observing some simple benchmarks. It is reasonable to assume that for most of us in this room our formal education was concluded about 25 years ago, and we moved then from our segment of life as a "learner" to that time-block labeled "worker."
What has happened in this quarter of a century since we became “educated”?

The men of medicine tell us that in their field virtually all the drugs which they prescribe today were unknown in 1938. Dr. Robert Oppenheimer told us recently that the fund of knowledge in the physical sciences approximately doubled from 1942 to 1951 and that this newly doubled fund of knowledge redoubled in the period 1952 to 1959, and it is reasonable to assume that this explosion in science has continued unabated. We have discovered a universe within the atom and the electron. We are venturing into the realm of outer space and, in fact, we may well be approaching the ultimate secrets of heredity and of life itself. All this since you and I put the books away. Within this past quarter century we are told by leading scientists that we have more than doubled the inventory of human knowledge.

Space craft, television (with or without color), jet propulsion, atomic energy, intercontinental electronic communication systems—all these have occurred since you and I were “educated.” These are but isolated examples of what has happened. We could talk about the electronic computer that today makes possible a set of calculations in seconds which, when you and I graduated, would have required more than a year for an intelligent, well educated man to have calculated. To state the case another way, let us acknowledge a fact that now seems to be well documented—more knowledge has been discovered during the lifetime of those of us in this room than existed at the time of our birth.

All this makes it abundantly clear that the single most distinguishing characteristic of our age, the single predominant fact in the world today, is the fact of unprecedented change. Not change in the evolutionary sense which has made it the thread of all history, but in the words of Secretary of Labor Willard Wirtz, “... change as it is measured today in megatons of technological, demographic, political, social, and economic explosion.” Mr. Wirtz cited some of the impacts on jobs of this constant of change:

A job used to be almost universally something a man expected to do the rest of his life. Often he inherited it from his father and his family name frequently came from the craft. All his lifetime work was dictated to him by the accident of his birth, by the sea coast, the factory, or the mill. Suddenly a man’s work has become directly geared to the developments of a science he neither controls nor understands and therefore fears.
Mr. Robert W. Sarnoff, Chairman of the Board of the National Broadcasting Company, speaking to the business leaders of Detroit a month ago, stated the case in these words:

Historically man’s adaptation to new circumstances has proceeded by fits and starts, aided by a generous allotment of time in which to accomplish massive transformation. But now science and technology are pumping a new form of quick-change fuel into the life stream of civilization and the time is past when we might count upon years of grace in which to alter concepts and methods to suit a differing environment. Today the unprecedented rate of change we experience and can anticipate is a fact unique in human experience calling for more rapid and drastic accommodations than have ever before been required.

What Dr. Oppenheimer has said, what Mr. Wirtz has said, and what Mr. Sarnoff has said may be summed up quite succinctly by saying that the great task of modern man is to avert early obsolescence.

Five years ago this point was made with great clarity when we were constructing a totally new curriculum for a new and promising undergraduate educational institution now known as Oakland University in Michigan. The slate was clean, we had no faculty to protect, no traditions to honor, no facilities to restrict us, no expectations to accommodate. We were new, and we were committed to a single purpose—that of building a program which would equip our graduates to move into leadership roles in the years ahead. In refining the curriculum in the field of engineering, we brought together five of the nation’s foremost engineering educators as our advisors and asked them how, in their judgment, we could build a curriculum which would most effectively achieve our objective. In a nutshell their advice was simply this—avoid a program which builds in obsolescence. They urged that we build a program for the second half of the twentieth century, not for the half century just past.

These advisors pointed out to us that in the field of engineering education there has been much too much emphasis upon teaching students how to build things. They argued that American technology moves so fast that any such approach would render our graduates obsolete in ten years. They proposed that rather than concern ourselves with the traditional specifics of engineering education, we must inspire our students to understand why things behave as they do and to give them the scientific base upon which they may build professional careers. They recommended that our engineering graduates have a strong liberal arts core so that they might first of all be
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educated men. They proposed that the curriculum be strong in mathematics, physics, and chemistry, and that the engineering courses taught be the fundamentals of engineering, and that a single degree of Engineering Science be awarded. Underlying all their recommendations—recommendations which we have followed explicitly—was the assumption that in our society no one could be educated adequately in four years or six or eight, but that the real engineering leaders of tomorrow must be committed to a life-long learning program.

The conclusion of this sudden turn in the tide of civilization is clear—a society that makes its educational investment exclusively for children and youth is on the way to becoming obsolete and is reducing its chances for survival. It is for precisely this reason that there is a new emphasis on the education of adults in America, for this reason that continuing education is shifting rapidly from a marginal to a central concern for many educational statesmen.

In the face of all this evidence, the dental profession can ill afford to be complacent, and I commend you for scheduling this topic into your program. Your profession is not exempt from this great revolution of change, and you have no immunity from obsolescence. Each of you must ask yourself “what is happening to my profession, to my community, to my society.” Each of you shall find the reason why continuing education is indeed an imperative of our time. Wherever you look in education today you find encouraging responses to this new concern. In San Francisco, or Detroit, or Philadelphia, or Boston, or in Walnut Springs, or Rock Island, or Kalamazoo, or Long Island, the evidence is powerful. There are programs which offer credit toward advanced degrees in virtually every profession practiced today. There are programs which have no concern for credits, or degrees, or examinations, or special recognition. They exist simply to satisfy the desire to learn. There are programs designed to improve technical skills, and programs to develop a more refined sense of beauty and sensitivity. There are programs in music, art, and literature; in world affairs and economics; in science and engineering; in public speaking and human relations. Wherever there is an identifiable need, an answer can be provided.

We at Oakland University, with the opportunity of freshness which has been ours, have initiated an experimental program designed to recognize the essential nature of continued learning. With the assistance of a grant from the Kellogg Foundation, we have inte-
grated the activities of our newly created alumni office with the functions of continuing education and have developed a program of alumni education which has as its objective to facilitate continued learning for our graduates. It is our hope that every graduate from our institution will never make the mistake of saying, “I was educated at Oakland”—but will rather take the position that he studied at Oakland University. We make a specific effort to indoctrinate our undergraduates with the fact that learning does not terminate with the awarding of a degree but that it represents but a phase in their total educational program. Through this new program, we provide a counseling service which maintains contact with our graduates, informing them of new and worthwhile literature in their field, keeping them in touch with their professional associations, and advising them of continuing education opportunities wherever they may be located. This office also works with employers to be sure that there is a coordinated effort to assist in the full development of our graduates. This is a different approach to those tried, to my knowledge, in any other institution in America. It is our way of underscoring the fact that education is not restricted to the young, that learning must continue effectively and aggressively if one is to avoid becoming obsolete.

Ours is an experimental program but it has promise. Whether it offers dramatic evidence of success in its specifics is not as important as the concept which underlies the program—the notion that learning is a continuing process and that the real purpose of a college education is to stimulate a never-ending desire to know.

You may well be saying to yourself by now, “All this is very impressive, but you can’t teach an old dog new tricks.” My answer to this standard position is clear—what may have been true for dogs and tricks is not pertinent for dentists and learning. We have long since toppled the notion that only the young can learn. Recent research in longitudinal studies where individuals were tested periodically over a 25- to 30-year period has proved that the brainpower of the older person is at least as good as that of the young. In the few instances of unfavorable comparison, almost without exception, they can be traced to disuse rather than to organic decline. Cecil de Mille summarized the issue most aptly when he said, “Man is never too old to learn. He only becomes old when the process of learning stops.”

But what can you as dentists do to provide for your own self-
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renewal? The question must be asked; the answers must be forthcoming. You in your work are particularly susceptible to the threat of obsolescence because of the very nature of your enterprise. You are so often a one-man venture—one chair, a steady source of clients, a busy schedule, a neat self-contained world. But it may well be a world which has its own self-contained evils.

Because you are professional men and because of the very nature of your work, I should like to propose that we borrow a page from the book of the university professor and establish a system of sabbatical leaves for dentists. I would propose that this very group give serious consideration to working and encouraging a scheme whereby every dentist would have an opportunity for a two-month sabbatical leave each four years. This would be a period when he left his chair, his office, his patients, his private world, and moved into the larger world of which he must be a vital part. In this two-month period, I would urge that half the time be devoted to studying new developments and new techniques in the dental profession and the other half concerned with a great variety of courses and studies designed to improve the man and to enrich his understanding of the world about him, of his community, and of his fellow man. Beyond his one-month concentration in keeping abreast of developments in his profession, I can see the dentist taking formal courses in such areas as world affairs, politics, economics, psychology, literature, philosophy, art, and music.

My proposal of two months in each four years obviously falls short of the ideal, but it is suggested as a reasonable and attainable objective. I am perfectly aware of the difficulty of adjusting one's personal and professional affairs to permit an absence even of this duration. Yet I am convinced that it can be done and that it must be done if you are to progress and to keep abreast of our society. This amounts to the equivalent of two weeks per year, and it is a cost which can very well be considered a capital investment—an investment in your own well-being and in your professional career. It would assure you of a longer and more productive career, and it would enhance the status of the dental profession. Increasingly some form of this program is being adopted by the leading business enterprises in our community, and I commend to the serious study of this body a program of this general dimension.

One of the leaders in the field of adult education in America, Dr. Paul McGhee, to whom I have referred earlier, commented recently
on the nature of our current society. He made reference to Peter Drucker's book, *Landmarks of Tomorrow*, where Mr. Drucker stated that the modern age represented by the last 300 years of western civilization is giving way to a new age not yet named. McGhee asks:

What shall we call it? Its name will later emerge by osmosis, by happenstance, but I want to anticipate. Perhaps by examining our situation we may be able to find a name not only for tomorrow but be able better to organize ourselves as individuals and as a society for that age. We have had agricultural societies with elaborate fertility rites, we have had the mortuary dynasties of the Nile, soldier societies and the tributes to Caesar, and the way we live now may come to be known as the age of technology with its tributes to creature comforts. I think we should have another name for this new age. I think we should name it the "learning society."

Dean McGhee has spoken with much wisdom. To you as professionals in your important work, as citizens in an ever more complex society, to you as humans capable of understanding and achievement, let me urge you to be a part of this learning society. Let us understand Margaret Mead when she said, "We are now at the point where we must educate people in what nobody knew yesterday and prepare people in our schools for what no one knows yet but what some people must know tomorrow."

Continued learning is an imperative of our time. If we stop learning we die.

**A Cooperative Effort on the Part of**
The University, the Dental School and The Dental Organization

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We are all aware that in a democracy such as ours professional progress must be based on a careful blend of scientific and cultural advancement—conceived and administered by self-governed groups in the interest of the public. I think the tremendous advancement of the dental profession reflects the truth of this fundamental concept. It is significant, however, that even though dentists have achieved
recognition and prestige for past accomplishments, the profession must redouble its efforts to serve a public increasingly cognizant of oral disease and rightfully demanding a better health service.

In the performance of this mission, the dental practitioner of today not only must exhibit great technical skill but, more importantly, he must be instilled with the discipline of the scientific method (1). He can be none other than a continuous student, needing a constant review and evaluation of the changing events that mark the progress of dentistry. The most effective deterrent to socialized dentistry is an alert practitioner demonstrating professional excellence in the community he serves. It is with this proposition in mind that more comprehensive programs of continuing education must be formulated, and woven into the framework of the dental profession.

It is quite clear that, if dental practice is to keep pace with the increasing quantity and complexity of dental research, the profession must give more careful study to current development in scientific documentation and communication. Since the turn of the century, dental and medical knowledge has increased at a fantastic rate, but the methods of communication among dentists and dental scientists have experienced little change. Dental education is having increasing difficulty in screening and disseminating the mass of new material obtained in the basic sciences. The interpretation and integration of these basic science findings with clinical procedures at the university level, and the effective transmission of this information to the practicing dentist, is a present problem and will become, in the future, a mission equal in importance to undergraduate dental education.

At the community level, the alert practitioner is certainly aware that improved techniques of communication must be adopted if his treatment methods are to stay abreast with current and future advances in dental science. The most significant discovery in the diagnosis, or treatment, of oral disease is of limited value until such information is placed in the hands of the practicing dentist (2).

Our objective is to review carefully programs of continuing education which might serve as models for future efforts at the state, or even the national level.

There are two prerequisites for success:

1. A dental society (local, district or state) with competent leadership at all levels, and a membership capable of detailed, organizational accomplishments in behalf of the profession.
2. A School of Dentistry with an administration that is dedicated to the proposition that its future mission in communication, motivation, and education will be equally concerned with the continuing education of the practicing dentist, as well as the preparation of the undergraduate student.

Now great emphasis is placed on the necessity for a fusion of effort between the dental society and the School of Dentistry, since a successful program must be thoroughly professional in character and, of equal importance, sensitive to and perceptive of the educational needs of the practitioner (3).

While we are concerned with the details, definite goals, and procedures for implementing a positive program, the basic objective is to develop a model plan that would demonstrate what I would describe as:

1. Educational enterprise in the real sense of the term—the formulation of educational programs which effectively interpret the changing body of dental knowledge, in a manner appropriate for mature members of a learned profession.
2. Methods of transmission, or delivery, of information which meets the practical considerations of a dentist's everyday situation.
3. An effort that is protected against exploitation from any source.

In this endeavor we will be creating the concept of "The University Without Walls" (4); a concept aimed at professional excellence, which, when dynamically presented and activated, breeds enthusiasm and is contagious even to our most resistant colleagues.

It is well to point out that such a program fulfills the original purpose in the development of our profession. The sharing of knowledge is the keystone of organized dentistry and, indeed, a principle common to all health professions.

While professional men have an inherent desire to improve their services, it remains that the success of all forms of continuing educational activity is directly proportional to the quality and enthusiasm of its leadership.

At the start, to help create a partnership of understanding, we will need to ask whether we recognize and share this fundamental assumption:

1. The scope and character of current continuing educational programs offered by our dental societies, Schools of Dentistry, and our literature, cannot be assumed to serve the needs of some 100,000 practitioners.
2. The fact that only 10 per cent of the profession now participate in Refresher Programs offered at the University level, and that the average registration at all State meetings is approximately 40 per cent, quickly re-
futes the claim that current methods of disseminating information are ade-
quate.

Dentistry is not alone in this matter. The American Medical As-
sociation has issued a study stating that continuing education is the
most important problem facing medical education today.

There is little comfort in the fact that medicine faces the same im-
portant problem. I am convinced that the dentist, or physician, who
is conducting a 1943 practice in 1963, constitutes a liability to his
profession.

If this view appears harsh, or dogmatic, let me present a statement
prepared from the President’s recent Conference on MetabolicDis-
eease, “The best education in the health professions can become ob-
solete in five years unless the practitioner makes a very determined
effort to continue his education.”

This, of course, does not mean that the dentist or physician who
has lost touch with the scientific progress of the profession cannot
render some form of health service. It does mean, however, that
these captives of the “status quo” are denying their patients the re-
wards of current research.

This should bring into proper focus the fact that there is a serious
gap between current, available knowledge and the application of
that knowledge in both dental and medical practice.

Of course, the assumption that, as practitioners, we could digest
the total volume of research information would be an impossible, if
not a ridiculous task, since our mission (as practitioners) is to carry
out treatment procedures on a maximum number of patients con-
sistent with a quality health service. With this thought in mind, let
us develop a plan which utilizes methods of transmission, or delivery,
of scientific information which meets the practical considerations of
everyday practice.

To accomplish this, we must restate our original premise: Such
a program can only be effective if there is a definite fusion of effort
between the dental society and the School of Dentistry.

In this joint effort we must depend on our faculties at the univer-
sity level to interpret, and translate, basic science findings into clini-
cal applications. The dental educator serves as the middle-man be-
tween research and practice. But it is clear that no matter how much
we improve our channels of communication from the basic sciences
(that is, research to the professional educator) all is lost if those who are to utilize this information (the practitioners) do not receive the message. To put it another way, if we develop the most powerful broadcasting network, and do not have anyone tuned in on our program, the Neilson Rating remains Zero, regardless of the quality of the show.

Very frankly, the success—or failure—of this effort rests essentially in the hands of the dental society. This is quite apparent when we realize that state, district, and local societies form the "grass roots" of organized dentistry, and have intimate contact with the membership. It is at this level that we must create, and instill, an atmosphere of intellectual curiosity that will be contagious even to our most resistant colleagues. Our educational committees, at these levels, working with the dental school faculties, must examine newer techniques of motivation and more effective methods of transmitting scientific information. We must reach out—touch—and gently lead by the hand the more than 60 per cent of the membership who do not attend scientific sessions.

Therefore, our challenge to the individual practitioner begins at the local level, with the establishment of firm professional liaison with colleagues who practice in the same area or community, by the formation of small consultation or study groups. This to be supplemented by the systematic review of the current literature.

It is important that scientific sessions and discussions presented by local and district societies be tailored to the needs of those who are to participate. The objective of this phase of continuation study is to carry the practitioner through a series of educational experiences that will not only inform, but stimulate. By design, programs developed and presented locally pave the way and elicit interest for the more detailed sessions presented by the state and national organizations.

General session programs lead the way to those presented in Limited Attended Clinics—and ultimately to the Basic Science Seminars. By this evolutionary process, the practitioner, who has demonstrated little interest in current advancements in dental science, is gradually pulled into the main channel of continuing education; which ultimately leads to the Refresher Programs conducted by the Schools of Dentistry.

So you see, we will be developing an orderly, positive process for the practitioner to maintain his lines of communication.
The University of Tennessee College of Dentistry and the Tennessee State Dental Association have united in carrying out a program as suggested here.

Many of you might ask, and rightfully so, why all the excitement about this matter of continuing education, when all members of the profession would endorse this as a necessary objective. The answer is that all of us pay lip service; and like motherhood, everyone theoretically supports this noble cause.

The unique feature and challenge of this process is that we are to discard the glittering generalities, and the "pie in the sky" rhetoric—so abundant in literature, and develop a positive program which can be scientifically measured and evaluated.

We should, as our program develops, record and chart both success and failure. We should analyze and modify our methods and techniques to make for a more productive effort. This has not been done. Rarely has the dental society and School of Dentistry pooled its talents. I would like to say that such a program neither threatens nor encroaches on the autonomy of either the University, the School of Dentistry or the dental society, but has as its sole purpose the maintenance of professional excellence.

In conclusion, it is recognized that the development of such a comprehensive program as suggested here gives new dimension to the structure, and is a challenge, to both the dental society and the School of Dentistry. But, I think that few would question the necessity of this program if we are to preserve and improve the educational standards of the profession.

Success in this endeavor will come from the combined efforts of this membership, skillfully guided by leadership well chosen, and actively supported.

Your reward as members in this partnership will be the satisfaction of participating in the advancement of a profession which performs a vital service in the community of men.

REFERENCES

4. Dryer, B. V. Lifetime learning for physicians: joint study on continuing medical education. Western Reserve University, School of Medicine, Cleveland, Ohio, 1962.
The State Dental Association and the Department of Health

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Special needs and purposes, emerging problems, local problems, nonacademic, noncredit, one time only, made-to-order, full partnership, experimentation, pilot study, synergism, demonstration—these are all words and phrases which come to mind when one thinks of the role of the state dental association and the department of public health in continuing education. Often this type of relation exists in areas where there is no school of dentistry—and in the United States today there are 24 states without a school of dentistry (1). In fact, one cannot find a dental school along the entire Rocky Mountain range from the Mexican to the Canadian border. Nor can one be found between Lincoln, Nebraska, and San Francisco, California. But even in areas of the country where there are dental schools, more than one state dental association has cooperated with its state department of health in sponsoring continuing education programs.

One of the earliest if not the first effort of this type originated in 1939 as a cooperative endeavor between the Tennessee State Department of Health and State Dental Association when the distinguished President of this College, Philip Blackerby, was State Dental Director in Tennessee (2). This year Tennessee is planning its 21st Annual Postgraduate Seminar and 15th Dental Health Workshop. Another early program started in Michigan in 1944: traveling seminars have been held under the joint sponsorship of the Michigan State Dental Association and State Department of Health for 19 years.

The developments from such efforts have been noteworthy. As but one example—in several areas a continuing education program provided by a traveling team of guest professors has been the nucleus about which a local dental association has been formed where none had existed before. The state health department and dental association have been able to bow out as sponsors and the local societies have taken over and managed their own continuing education sessions on a regular basis.

In New Mexico, continuing education programs under the aegis
of the New Mexico Department of Public Health and New Mexico Dental Association are entering their eighth year. There they have taken three forms: a centralized, formal seminar held annually at the University of New Mexico; informal workshops held at isolated resorts such as guest ranches and mountain lodges; and the third type sends selected dentists to refresher courses at a school of dentistry out of state. The centralized seminars have been strictly academic emphasizing new technical information—usually related directly to clinical practice but often with public health overtones. The informal working conferences have been directed more at the social aspects of dentistry and dentistry’s relations with the public. Informal participation and discussion by all rather than formal lectures have been emphasized. These conferences have been held every other year and have resulted in several interesting developments. Details and the evaluation of these activities have been described elsewhere (3, 4).

Frequently where a state dental association and department of health have cooperated in establishing some type of continuing education—formal or informal—it has been to bring continued education to the practitioner and to make it easier for him to attend courses and acquire additional education. In other instances, the courses have been sparked by a special problem or a particular need. For example, the recently emerging problems of radiation hygiene, mouth protectors, and of bringing dental care to the homebound have resulted in the organization of special courses in several states.

Another pattern in the cooperative endeavors of state dental associations and health departments in continuing education is that of sending dentists away to school for short courses. This practice has been particularly prevalent in the Rocky Mountain area where several hundred dentists from Colorado, Idaho, New Mexico, and Wyoming have gone outside the state to attend courses in dentistry for children, in cleft palate rehabilitation, in the care of crippled children, and in the detection and treatment of oral cancer. Recently the Idaho Department of Health and State Dental Association have been sponsoring groups of dentists for courses in periodontics. Sometimes funds to pay part of the expenses of such programs are found in the budgets of the state health departments, sometimes from voluntary agencies such as cancer and heart associations, or crippled children’s societies, sometimes from the funds of the dental association, and
various combinations thereof. Frequently much of the cost is borne by the individual dentist. In New Mexico the initial stimulus was a grant from the W. K. Kellogg Foundation.

It should be emphasized that where these programs have seemed most successful the health department and dental association have engaged in a full partnership—that is, both agencies have shared in the planning, operation, and financing. Paradoxically, the health department gradually may withdraw from active participation as the program becomes self-propelled. In New Mexico, for example, the State Health Department, although still listed as a sponsor, really has done little lately of the original chores which it once undertook. The Extension Service of the University of New Mexico now handles routine mailings, secretarial duties, and most administrative procedures. But it was necessary for the State Health Department and the State Dental Association to demonstrate to the University that such courses could be self-supporing.

It would seem to be important, too, that the needs and interests of the practicing dentists be considered. In New Mexico—please pardon my many references to New Mexico, but I was asked specifically to share my New Mexico experiences with you—in New Mexico initially a survey of the practicing dentists was conducted to find out if they wanted refresher courses, and if so, just what it was they wanted, to what subject areas they would give priority, what tuition they would be willing to pay, and where they wanted the seminars held and for how long (5). Surveys were carried out periodically thereafter to aid in evaluation and in planning (3, 4). Also, the Council on Professional Education, a representative group of dentists appointed by the State Association, serves as the planning group with the University and the Department of Health. The most popular subjects usually are placed on each program but the programs often are sprinkled judiciously with a pinch or two of a subject less popular.

These state-sponsored activities sometimes contrast sharply with the formal programs conducted by schools of dentistry which may become ankylosed by the stiffened customs and calcified traditions of the academic locus. For instance, more than 90 per cent of the schools of dentistry offering refresher courses report that their continuing educational programs had followed the same patterns for several years (6). Also, we teachers used to "lecturing" to undergraduates sometimes may tend to become a bit dogmatic. We may teach
the students rather than provide opportunities for the students to learn. As a neophyte teacher I have discovered to my chagrin that teaching can take place without learning, and that learning can take place without teaching. I am not saying that there is no room in continued education for formal courses offered by schools of dentistry. What I do want to emphasize is that there are advantages inherent in the continued education program operated by the state dental association and the state health department. These sponsors are freer perhaps to experiment, to try new approaches, to dabble with the untried or unorthodox—albeit judiciously. They frequently can use informal approaches to learning. The learner also feels freer perhaps to question and to discuss and thus to participate and share than he does in the formal academic setting.

Furthermore, the rules and regulations of the academic institutions may be such that courses for the adjunctive personnel of dentistry—the assistants, non-degree hygienists, and laboratory technicians—are not permitted (not by the dental school faculty, but by those "ivy-covered academicians" across campus!). And should not dentistry be concerned with the continuing education of its auxiliaries? Blackerby and Hillenbrand have both answered, "Yes" (7, 8). No such rules constrain the state dental association and the state health department. They can provide continuing education programs which are tailor-made to the special needs and interests of dentistry and its auxiliaries.

In 1955, Blackerby (7) in discussing whose responsibility it was—i.e., the dental school, the dental society, the state board, the state health department, dental industry, or the individual dentist—for providing continuing education opportunities, concluded that each agency has its place under proper conditions and that their functions are complementary. With his permission, I suggest that where the full partnership of the state dental association and the state health department has existed it has been not only complementary but also synergistic. The combined action of these two agencies has been greater than the sum of the agencies operating alone. And the additional benefit realized has redounded not only to the profession but also to the public—the group that all this continuing education is really for anyway!

**REFERENCES**


The Interest of State Boards of Dental Examiners in Continuing Education in Dentistry

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Having knowledge of the principles of how to make friends and influence people, I should know better than to start off with a sour note today, but the anecdote I am about to relate affects no one in this audience, nor any person now living, and it does serve to make a point.

Quite a few years ago, it became my lot to present a certificate of honor to another dentist. The certificate was loaded with phrases to the effect that this old timer in our profession had rendered distinguished service to the public. I have given other such certificates with considerable pleasure, but this award really stuck in my craw, for I knew personally that this man in fact had practiced pretty shabby dentistry, and that he made no effort to keep abreast of the expanding knowledge of our calling.
I carried on with the distasteful ceremony, but I know now that my conviction was strengthened that night, that if a professional man's own sense of integrity and intellectual curiosity do not lead him to keep informed of scientific developments in our healing art, then some minimum degree of coercion should be used. I felt that night, and I feel now, that simply receiving a diploma, passing the State Board of examination, and paying license renewal fees for a specified period of years does not make a good dentist. I say the public deserves better than this.

The incident just related happened at about the time I became a Fellow of the American College of Dentists, and just a few years before I was appointed to the Florida State Board of Dental Examiners. These affiliations have had much to do with my continued and increased interest in postgraduate education in our profession. We are all aware of the continual influence this College has on the Fellows in this regard. I will relate a little later the influence the position as a member of the Florida State Board has had on me in this respect.

Continuing education of members of our profession has been a prime objective of this American College of Dentists. You may recall the following quotation: "As a professional man, the dentist has both a need and an obligation to continue his education throughout his career. With the continual expansion of knowledge brought about by research, the dental practitioner must strive constantly to keep himself and his methods fully up to date in order that his patients may receive the modern, adequate dental service to which they are entitled. For the profession, the desire for continued education should be spontaneous and voluntary rather than the mere conformance to regulations or traditions." Philip E. Blackerby, our distinguished President, made these remarks while moderating a panel discussion at Miami Beach, Nov. 3, 1957.

At this point we should define what we mean when we use the phrase, "continued education." I use the term to mean informal courses, usually of short duration, which are offered to private practicing dentists to acquaint them with new developments in techniques and science.

It is agreed that the obligation of attendance and participation in such courses and programs rests squarely on the dentist as his duty to the public. But does he really perform this obligation? So many dentists do not that the profession as a whole suffers from their lapses.
As a responsible profession we are permitted so far to govern ourselves, and if I shock some of you by advocating something in the laws of the various states to require continued evidence of competence in the light of advanced knowledge, I do not want to be branded as one necessarily in favor of government centralization or increased interference with individual rights and freedoms. It simply is that I do not think there is an individual right to practice second rate dentistry on the public through individual refusal to keep abreast of professional scientific progress. Our privilege of self regulation of the profession carries this type of responsibility along with it. As I see it, all requirements set forth in the various dental practice acts are secondary to the responsibility of the practitioner to provide proper treatment to his patients—either by the practitioner’s initiative, or by force of law.

For the past 29 years I have participated actively in the administrative affairs of our profession. Thus, I feel qualified to make the accusation that our membership is not assuming its full responsibility and obligation. Our own statistical records show this to be true.

When I was asked to speak on this topic today, my first thought was that I had better find out directly from each State Board what they were doing and what their interest was in continuing education. In letters to the State Boards of Dental Examiners I asked the following questions, among others:

1. What is the attitude of your Board toward the continuing education program in dentistry?
2. Do members of the profession in your State adequately participate in such a program by attending dental meetings, postgraduate courses, etc.?
3. What is the consensus of your Board on whether the program should be voluntary or by legislation?
4. What efforts has your Board made, successfully or unsuccessfully, to encourage a continued education program in your State?

I wish at this time to thank the 38 Boards which responded to my letter.

A quick summary of the responses led me to this conclusion: State Examining Board members, with a few possible exceptions, favor a continuing education program. Most boards felt there had been improvement in interest among dentists in attending refresher courses and postgraduate courses, as well as district, state and national meet-
ings—but still leaving room for vast improvement. Of those expressing percentages, the average was well below 50 per cent attendance. On the whole, the Board secretaries responding to my inquiry felt that dentists of their areas were not participating in continued education programs as well as they should.

But the liveliest response of all was to the question that asked whether improvement should be sought on a voluntary or a compulsory pattern.

Making allowance for some indefinite answers, there probably was a small majority favoring only voluntary action. Among those favoring legislation requiring dentists, in one fashion or another, to continue their education, some were doubtful if such a law could be passed, and if passed, whether it could be administered effectively. Some favored pilot programs or a gradual approach, possibly a requirement of attendance at state meetings. Many indicated some interest in possible changes in Dental Practice Acts to require membership to keep abreast of scientific developments with a continuing education program, including a dozen respondents who favor some mandatory provision to this end. Twenty of my 38 replies leaned to a voluntary solution.

Very few State Boards have official programs relating to continuing education, though often members of these boards have strong convictions on the subject. The tendency is to administer the laws, which of themselves barely touch the matter of continuing education.

The Florida Dental Practice Law, like many of other states, pertains to and regulates almost everything regarding the profession except requiring that dentists keep on their toes scientifically and technically. Florida, and at least two other states have conditional renewal certificates relating only to individuals who do not regularly practice in those states or maintain a domicile therein. These Boards may require such applicants to demonstrate that they have maintained professional skill and knowledge before they receive a renewal certificate that permits them to practice.

But for resident dentists, our Florida Board, once a man is originally licensed, has no further jurisdiction over his future professional progress. We have authority to revoke or suspend the license of a dentist for various reasons, from the size of his sign to his personal conduct, but we have no authority, and I don't think any other Board has, to insist that he improve his skill and sharpen his mind.
A bit earlier I promised statistics to show why I feel that dentists on a voluntary basis are not keeping abreast in a continued education program. Only 40 per cent of dentists attend their annual State professional meetings. My own state may be typical. In the past five years only 48 per cent of Florida dentists attended our annual meetings, and in four of these years the meetings were on the lower East coast where half of our nearly 2,000 members practice. A record of district meetings shows that less than 50 per cent attend. How many attended largely for social reasons is anybody’s guess.

We have a very active Postgraduate Committee which arranges top-notch courses at the University of Florida with men of national reputation as instructors. In a series of 16 of these courses since 1959, the attendance was as low as 2.1 per cent of our membership, and never more than 9.6 per cent.

Inquiry of five dental schools closest to Florida showed that from 1960 through July of 1963, only 120 Florida dentists took refresher courses at those universities.

Florida attendance at the 1961 session of the American Dental Association was 132. The following year when the meeting was in Miami Beach, in commuting distance of 50 per cent of Florida dentists, we had 1,152 attending.

At the Chicago Mid-Winter meeting of 1962 there were 50 dentists attending from Florida. At the Hinman Clinic, one of the largest meetings in the Southeast, there were only 139 Florida dentists attending in 1963.

I am happy to report that the seven members of the Florida State Board of Dental Examiners are Fellows of the American College of Dentists. We all are wholeheartedly in favor of improving the continuing education program. But we are divided as to how this best can be done. We all feel that a man’s professional education should not end with his graduation from dental school. Dr. L. R. Main, a past chairman of the Continuing Education Committee of the American College, put it concisely by saying: “In a growing profession, he who has graduated yesterday and stopped learning today, is uneducated tomorrow.”

My own feeling is that it is absurd that a State Examining Board is required to grant a renewal certificate to a man, regardless of whether he “cracks a book” or attends a meeting, merely if he conducts himself within the law and pays a fee. This permits him to
practice year after year on the public even though he may not be rendering his very best service because he has not acquired the latest knowledge.

Thus, the backslider or the indolent takes all the advantages and prestige of his profession and contributes little, if anything, to improve the image of it.

Before our Board employed an Executive Director, it was the duty of each Board member to inspect the dental laboratories in his area to see that the dentist and the laboratory technician were complying with the work order phase of our law. I tell you from personal experience, not common to every dentist, that it too often was disheartening to see the type of work many practitioners turned over to the commercial laboratories. In many cases we had real reason to doubt whether the finished product would serve the patient at all well.

The idea of requiring professional people to keep posted on developments of their art is not altogether new. Long have school teachers been required to attend Summer School to increase their worth to the public. Have we no less an obligation to ourselves and to our patients? And if we know that the obligation, in spite of widespread urging, is not being met voluntarily, should there be compulsion?

A number of us on the Florida Board thought so, and worked with the Legislative Committee of the Florida State Dental Society during the 1961 Legislature in an attempt to put measures in the Dental Practice Act that would require at least some continuing study. We devised a point system which would require a certain number of postgraduate courses, attendance at local, district, state and national meetings, etc. A minimum number of points would be required before a renewal certificate could be issued.

We were naive enough to believe there would be no objections to this by the general membership. We thought there would be opposition from fringe members and lukewarmers not really interested in the betterment of dentistry. The proposed point system aroused a wide storm of protest. An organized effort by-passed the State Executive Council which had approved the proposal, and went directly to the Legislature in opposition. We had to withdraw the point system in order to get other noncontroversial amendments to the Dental Practice Act passed.
Later, some of us proposed to the State Executive Council a voluntary plan that would have entailed awarding nearly $1,000 in professional supplies as prizes for dentists attending the most postgraduate and refresher courses. This was turned down.

In the 1963 Legislature, the members of our Board who advocated continuing education by legal requirement, made a further effort and had to retreat in the face of opposition from a large number of our members.

Our Florida Board is adding an inquiry to its application forms for renewal, as follows: “1. Please list all postgraduate courses attended in the last 18 months; 2. List all professional meetings attended during the last 18 months.” The idea is to show that we would like dentists to do these things, but the answers, under our law, can have no bearing on issuance of a renewal certificate.

The latest effort, not by the Board per se but by interested members of the Board and the American College of Dentists, was made at the Florida Section meeting this past May. We had the following motion adopted: “That the Florida Section of the American College of Dentists develop a program, legislative or otherwise, that will require the members of our profession in this State to keep abreast by continued education and that this program be pursued until it gains the approval of the members of the profession and is adopted and put into operation.”

In conclusion, I would like to echo some comments made by my pastor from the pulpit not long ago. He said: “God has given his people the foresight, the wisdom, the fairness, the sense of responsibility to solve the many problems confronting us—space, racial, economic and numerous others of great magnitude.”

If we have the ability to solve such problems—and I believe we really do have that ability—then we ought to be able to solve this relatively small problem of requiring all members of our profession to equip themselves with continuing education on at least a minimum basis, to give their patients the kind of attention they have a right to expect.
Baselines and Responsibilities in Continuing Educational Efforts

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A man of normal intelligence may be limited in his knowledge and skill at any particular time, but the opportunities for increasing knowledge and improving skill have no limitations. It is a mark of excellence for professional people to recognize the extent of their ability, but failing to pursue means of furthering this ability and keeping up-to-date is violating an obligation. The importance of continuing educational efforts has been fully established for persons engaged in all professions. Those who have the basic knowledge and skill for restoring and preserving health have even a greater obligation to further their education and keep abreast of all new developments pertaining to their specialty.

There would be very little satisfaction to participants in any science if that particular field were static and had no room for advancement. Fortunately, new developments in the science of dentistry are occurring at a rapid pace. The dentist can be pleased with the advancement of his profession and he must accept the challenge of continual personal growth. Recognition of this fact has been expressed by G. V. Black in the often quoted, well-chosen words, “The professional man has no right to be other than a continuous student.”

In the broad sense of the term, participation in any educational medium or program may be regarded as a continuing educational effort. The general application in dentistry would imply additional knowledge over and above that which was acquired in earning the dental degree. But let us be more restrictive in our definition. Two types of programs leading toward an advanced educational level have been separately categorized. Reference is made to graduate studies with M.S., M.S.D., or Ph.D. degrees as the objective, and to postgraduate programs with specialty certification as the objective. Such programs are beyond the scope of this talk. We shall also eliminate those types of study which are conducted independently such as attending professional meetings, following an organized plan of reading, and engaging in clinical or laboratory research. Our main attention will
be devoted to programs of study in which the policies affecting the leader or director and the class or sponsor bear special consideration. Examples are refresher courses, extension courses, lecture tours, seminars, and study clubs. In short, this discussion on baselines and responsibilities shall be restricted to those types of continuing education which are not formally recognized as an advanced level of preparation.

Increasing emphasis has been placed on formal programs of continuing education during the last two decades. Immediately following World War II, dentists who were returning from the service made a tremendous demand for opportunities to refresh knowledge and update techniques. The schools were not adequately prepared to provide this type of program, either because they failed to anticipate the need or because of the shortage in teaching personnel. Immediately, however, schools began to organize formal programs as an answer to the growing demands for updating professional knowledge. Now practically all schools have made these additional educational opportunities available to the practicing dentists who wish to enroll. Many societies and smaller groups have collaborated to take organized short courses to the practitioners in various cities. Yet many of these courses and programs are not presented because of an insufficient number of interested dentists.

Some organizations specify regular participation in continuing education as a requirement for membership. This procedure suggests that members are continually preparing themselves to render a better service to their patients. The idea is sound and the effect seems worthwhile, but there are entirely too few who uphold this high standard. Responsible leaders in the profession should begin to look toward a method of requiring all dentists to fulfill their obligation of being a continuous student. This could be accomplished through the cooperative efforts of dental societies and state licensure boards. Annual registration supported by documented evidence of periodic course enrollment would be an effective way of implementing such a program.

The trend of professional thinking is toward continued development. Undoubtedly, when the history of dental education for this era is written, the effect of continuing education will be the most pronounced contribution. It seems fitting and proper, then, to correlate some thinking on baselines and responsibilities. The Ameri-
can College of Dentists has taken a position on such matters and has reported this position in its various publications.

Sharing of knowledge. Members of all health professions have one objective in common—the welfare of the patient. The professional man’s service may be directed toward the immediate or ultimate benefit of the individual or humanity in general. With this common objective in mind, it is the obligation of all professional persons to give freely of their talents to the advancement of the profession, and if capable to spend a reasonable amount of time for the purpose of improving the skills of others. This is important because the present knowledge and level of accomplishment in the skills of our profession represent the experiences and contributions made by individuals at a time when they were privileged to share with their colleagues.

Courses of instruction. Organized courses of instruction are the most effective ways of sharing knowledge. Dentists who have something worthwhile to offer and who have the opportunity to make program contributions should accept assignments when the course is planned and presented under the proper auspices. However, if the demand on the clinician or lecturer exceeds the amount of time he can devote to such activities, due to health, contractual obligations, etc., he should limit such assignments to the number that he can handle, and decline all others. To make his services available on a high fee basis violates his obligation to his profession. Personal aggrandizement and/or financial return must not be the initial incentive or the predominating influence.

Auspices. The term “auspices” means the conditions under which a program of continuing education is given. Proper auspices suggests that the total responsibility of the course rests with the sponsoring association or institution and not with the individual. This responsibility includes organizing, planning, financing, and conducting the program. The instructor, lecturer, or clinician carries out the will and intent of the responsible parties and thereby becomes a part of the auspices. Recognized dental societies, approved dental schools, and other non-profit professional and educational organizations would be considered proper and acceptable for course presentation. Any conditions under which an individual independently arranged and offered a course would not be acceptable.

Financial Remuneration. Policies for continuing education in-
struction will differ from those governing regular appointments in dental schools. When a professional person is selected as an instructor, clinician, lecturer, etc., it is assumed that his formal presentations will require special preparation and therefore some financial compensation is in order. Payment for such services should be reasonable, conservative, and should be based upon the time and expenses involved. Normally, an essayist should be reimbursed for personal expenses incurred as a participant but under no circumstances should these expenses be determined on the "loss of practice time" basis. Every dentist should keep in mind that he owes some of his time to the advancement of his profession and this usually means some sacrifices in his practice time.

An honorarium may or may not be offered depending upon the circumstances of the sponsoring group. The clinician or speaker has every right to accept an honorarium, and he may even expect one. However, the availability of payment for service should not be the criterion on which he accepts or rejects an invitation. By the same token, the sponsoring group receiving the benefit of the lecturer's time and efforts should feel an obligation to make some compensating arrangements for this service. The amount of such honorarium must always be modest and reasonably uniform for various speakers.

Under no circumstances should an essayist dictate the amount of money desired for delivering a lecture or directing a course. The amount of the honorarium and plan of compensation for personal expenses should be stated at the time the formal invitation is extended. If the conditions are not satisfactory, the dentist receiving the invitation may graciously decline without violating the ethics pertaining to his position. A refusal should be based upon reasons other than finances, thereby eliminating the possibility of negotiating for higher compensation. Many schools and societies have preferred to offer the lecturer a flat sum which is expected to cover all expenses plus the honorarium. This procedure is satisfactory as long as a uniform policy is followed. Other schools and societies have elected to pay an amount determined by totaling first-class transportation, a per diem allowance, and the honorarium. This latter procedure encourages uniformity by adequately providing for the fluctuating aspect—transportation. Organizations which elect to pay hotel expenses in lieu of a per diem allowance often find that the tastes of their speakers can create a wide variation in this particular expenditure.
The practice of compensating lecturers on the basis of a per capita percentage of the fees charged is not an acceptable procedure. Financial arrangements should be made between the sponsor and essayist for the sole purpose of presenting a paper or directing a course and should not be determined by the number enrolled. The sponsoring group should be prepared to meet all financial obligations connected with the course or lecture and also benefit from any surplus which might accrue.

The organization responsible for planning any special continuing education event may reserve the right to cancel if an insufficient number of applications are received. This procedure makes it possible for the sponsor to refuse the presentation of a course if the financial backing is not satisfactory. Cancellation under such circumstances does not violate the objectionable per capita payment policy. Naturally, a reasonable amount of time should be allowed so that the lecturer will be able to make adjustments following a cancellation.

Study Clubs and Seminars. Study clubs and seminars offer excellent opportunities for further professional development. They may be sponsored by an organization or they may be organized by an individual. The objectives are basically instruction and investigation. They should be conducted on a non-profit basis with no effort toward personal gain. Where a qualified instructor is needed to lead the study club or seminar, reasonable compensation would be in order. The amount should be determined in the manner previously suggested.

Course Titles. Naming of courses of instruction, seminars, and study clubs deserves some consideration in a discussion of baselines and responsibilities. Frequently, the name of the individual giving the course is attached to the title; for example, “Dr. John Doe’s Course in Prosthodontics.” This procedure is regarded in poor taste since it implies a promotion of the individual as much as the course. A preferable reference would be “A Course in Prosthodontics: under the direction of Dr. John Doe.” Naming study clubs in honor of living individuals has the effect of promoting the person and is frowned upon by this College. Honoring the name of one who is deceased is not objectionable. At the same time, it is preferable to use a descriptive term which identifies the course, such as “Gold Foil Study Club of Omaha, Nebraska.”

Literature contributions. The preparation of papers for publication is another means by which the dentist can contribute to the on-
going program of continuing education. The authenticity of the material presented should be fully established, or if otherwise it should be so stated. The American College of Dentists looks unfavorably on the contribution by Fellows to proprietary publications. There are many professionally owned journals which are acceptable outlets, even though the circulation may vary considerably. The dentist should avoid any circumstances where his name, his photograph, his lecture, or his writings may be interpreted as an endorsement for a commercial product.

In summary: programs of continuing education should be developed with responsibilities specifically outlined. They should be planned and conducted under the auspices of dental schools, dental societies, or similar organizations. Compensation for instructors and directors should be consistent with the highest ethical standards keeping in mind that any member of the health profession has an obligation to share knowledge which may benefit patients in general, without any personal promotion or financial profit. Every professional man is obligated to pursue an organized program of self improvement in his capabilities of rendering health care. Obsolescence in knowledge or technical skill is a violation of the trust committed to those who become professionally and legally qualified to tend the health needs of others.

The history of dentistry in the United States has been marked by a careful blend of scientific and cultural advancement conceived and administered by self-governed groups in the interest of the public. If we are to continue to enjoy the privileges of a free society in this era of the biological revolution, more realistic methods must be designed to assure the competence of those who practice.—William R. Patterson, J. Am. Col. Den. 27:24, March 1960. From "Continuing Education: A Challenge to the Profession."
The Need for Leadership in the Field of Higher Education

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I am honored to participate in this convocation of leaders of the profession of dentistry. Not only do we take pride in your profession at home, but also we recognize the pre-eminent position abroad of American dentistry. Thus, an invitation to speak to American leaders of dentistry is an invitation to speak as well to world leadership of this profession essential to the health and welfare of mankind.

The invitation to speak is honor enough, but to this you have added the possibility of Honorary Fellowship in your distinguished group—a distinction which I will prize and cherish. I speak of the "possibility" because if I "flunk" this speaking assignment, I assume there is still time for the use of the blackball.

The topic assigned to me is the need for leadership in higher education. It is customary these days to approach a topic of this nature in quantitative terms. I will spare you this type of treatment. Instead, I wish to talk of the need for leadership arising from our intellectual and scholarly development. To discuss the topic from this standpoint it is necessary to examine in some perspective the special nature and challenges of the times in which we live, and the broad historical and educational trends which have taken us to where we are now in our national development.

I see at least two previous eras in our history. The first era was the era of conquest. It lasted from discovery through Colonial times into the second half of the nineteenth century. During this period we pushed forward our geographical frontiers; we settled our land. The popular hero of that day was the man of physical courage and endurance, of muscle and of brawn, and of tough moral fiber.

This was a period also of loneliness and individualism, of "each man for himself."

Convocation Address, Atlantic City, October 13, 1963.
The principal mission of higher education during this first era was to train the spiritual leaders of the frontier—to give spiritual strength and inspiration to men and women as they fought the inhospitable wilderness. Our early colleges likewise provided a measure of training in whatever limited professional skills were required by the simple society of the times.

The second period of our history was the era of social amalgamation. It lasted into the first half of the twentieth century. This was the era of the “melting pot.” English, Irish, Germans, Italians, Greeks, Poles, Russians, and people from many other countries combined their individual cultures, their talents, and their aspirations, millions of new ones arriving in a single year; they learned here in the New World how to “get along”; and gradually they fused or “melted” into a new united people, with a national identity all its own.

Thus the era of social amalgamation searched for social homogeneity and “typicalness” for solutions to the problems of group living and “group adjustment.” This was a period not of loneliness and individualism, but of “togetherness,” of belief in “strength in numbers,” and of steadily growing pressures toward a degree of conformity.

The principal mission of higher education during this second era was to train the social leaders of a maturing society. Our colleges and universities also provided the ever greater number of professionally trained men and women required by an increasingly complex America. Professional schools were established to supplement liberal arts divisions—law schools, schools of education, medical schools, dental schools, music schools, business schools, and so on, came into existence. The social sciences, in particular, grew in significance.

American education in this period acquired a strong sense of social obligation. Our elementary and high schools, but also our colleges and universities, served as the effective instruments of social amalgamation. Open doors to education were deemed essential to equality of opportunity. High school attendance became nearly universal. College enrollments likewise increased rapidly, not only because of population increases, but also because ever higher proportions of college eligible youth sought higher learning.

The era of social amalgamation now may have come to an end. In the 1950's we may have crossed the threshold into a third period of our history. I should like to call this the era of imagination.
Our land now is conquered and settled. Our American society is formed, with its own unique identity. Compared to the years of the second era, our group life now is reasonably adjusted. I make this assertion fully aware of the tragic summer of discontent we have witnessed in the field of race relations. While some of our most serious problems still are problems of group-living-in-harmony, most of us are equally confident that with patience and good will these remaining problems will come ever closer to satisfactory solution.

The other challenges of this new era, however, are as difficult as those which we confronted earlier; but the opportunities and rewards which they offer also may far exceed even our boldest dreams—new and better materials, new products, new forms of energy, new standards of health, a new prosperity, and even new space in new worlds now are within our grasp. But also before us are new and better ways of doing things, a new faith in excellence, new ways of life and leisure, and new ways of war and peace.

All of these are challenges to our minds and to our imagination. In this era of imagination, therefore, research, which employs disciplined imagination, is likely to expand at a faster rate than any other human activity. There will be a great deal more thinking in this era than ever before in our history.

The new era may again be a period of loneliness and individualism, thus completing the cycle. The new loneliness, however, will not be the geographical loneliness of the prairie, but intellectual loneliness—because the world of the mind and imaginativeness is a lonely world. The new individualism will not be individualism of the old "rugged" kind, but the individualism of intellectual independence, scientific skepticism, originality, and honest non-conformity.

The central mission of higher education during the era of imagination will be to train the intellectual leaders. This mission will be extraordinarily complex, and its successful fulfillment in itself demanding of much imaginativeness. For at the same time that we shall have to encourage the highest intellectual excellence, of which necessarily only the few most favored minds are capable, we also shall have to provide ever higher levels of education for steadily larger numbers of youth of only average talents. We shall need higher intellectual peaks arising from an even higher educational plateau. The era of imagination will require a corresponding improvement in competence at nearly every occupational level—from the most routinely technical to the most exceptionally creative—and, in fact, a rise in
understanding likewise for the mere exercise of intelligent civic responsibility in a society of new complexity.

During this new era, college and advanced graduate and professional enrollments, therefore, will continue to increase. With their unique patterns of work and discipline, colleges and universities traditionally have provided the most effective educational device to lead young men and women toward intellectual maturity and disciplined imagination. Also, they have furnished one of the most suitable and stimulating environments for the creative work of imaginative, mature, research-minded scholars. Thus we can confidently predict that in this new era our institutions of higher learning will acquire a new importance; our colleges and universities will be called upon to perform to an ever increasing extent the intellectual services for an ever more thought- and idea-conscious society. Hence, the function of educational leadership likewise assumes new importance. It is urgent, immediate, and critical. It bears heavy responsibility for the adjustments required of education if we are to rise to the opportunities of the new era of imagination.

Happily, our present system of higher education includes institutions of a unique diversity of purposes, organization, control, and educational philosophy so as to meet the wide variety of educational needs of our society. In the era of imagination, with its new individualism and personal preferences, different intellectual competences which will need to be served and educational goals of students and scholars which will be still more varied than now, we shall need to provide a suitable setting for the development and growth of each individual intellectual personality.

Happily also, our system now has unusual flexibility to experiment in new methods of teaching, new methods of learning, in new organizational patterns, and perhaps, even in new educational purposes. Certainly one of our society's most essential instruments in the era of imagination will itself have to be adaptable and capable of change.

My university in this new era has had the good fortune to have a great leader as dean of its School of Dentistry. I have watched how he has devoted himself to his own professional growth. I have observed how he has carefully and persistently built and planned a distinguished educational program, fashioned by a great faculty. He has labored sacrificially in the discharge of his duties, working endless
hours, day and night. Dean Maynard Hine has dedicated himself to the philosophy of man’s capability of infinite progress, and his School is testimony to this faith.

I also was blessed during my work as President of the University with faculty colleagues which included outstanding leaders, dedicated to the search for truth. For example, Dr. Joseph Muhler and Dr. Ralph Phillips have shown remarkable leadership in their field of dental research and some 15 or 20 others, also members of this distinguished organization, have shown the leadership in teaching, research, and public service which must be present in the faculty if an institution can be said to discharge its leadership responsibilities.

I was further bolstered in my tenure by alumni who were dedicated to the objectives of a great university. I can point with especial pride to the alumni of our School of Dentistry, a number of whom are members of this College including the President of the American Dental Association, Gerald D. Timmons. They have exerted the leadership in the profession without which little could have happened.

Finally, the lay trustees of a university must bear their share of leadership. Here, too, I have been singularly fortunate. The story is told of a well-known Bostonian who was quite upset at not being chosen to fill a vacancy on the Harvard Corporation. A friend, to console him, pointed out that he had just been named to an important advisory post in Washington. His reply was simple, “Ah, yes, but that was only national.” This is the characteristic of a true trustee of a university—that the post is one of man’s highest honors.

Have you noted by this time that each one of you can be an important leader in an institution of higher learning as alumnus, faculty member, administrator, or lay servant of the cause? Leadership must be present in many places in a university if it is to be a great university. Each one of you has the opportunity.

My friend, Harold Dodds, long time President of Princeton, has written, “America has need of thousands of leaders who will never be elected President or even governor of a state or president of a professional society, but who, quietly and without ostentation, nevertheless will exert true leadership in their several walks of life.”

I read with approval in this year’s program that “fellowship” in the American College of Dentists “... is really synonymous with leadership. Conferral of the F.A.C.D. constitutes recognition of out-
standing service, but it also identifies the bearer as a leader of whom continued service and leadership are expected. Thus, as we accept the honor and privilege of fellowship, we acknowledge a continuing responsibility as well.”

One of my presidential predecessors at Indiana University was David Starr Jordan who migrated from Indiana to become the first president of Stanford. It has been said that Dr. Jordan belonged “to that noble company of men who reach the mountain tops of achievement. He had the spirit of the pioneer, a mind that was unafraid, though the guiding footprints of those who preceded him thinned out until they left no trace. Where most men would halt and turn back, he pressed onward with renewed zeal and enthusiasm.”

A manifestation of his daring is revealed by his climbing of the Matterhorn on one of his walking trips through Europe with a group of his students in natural science. The Matterhorn was the last of the great Alpine peaks to be conquered by expert mountain climbers.

In his autobiography, Dr. Jordan wrote of their approach to the great peak, “Ever before us as we mounted the green valley, above us as we toiled up the pass, above us everywhere—dark, majestic, inaccessible—rose the huge pyramid of the grandest of the Alps, its long hand clutching at the sky. The Matterhorn burns itself into the memory as nothing else in all Europe does. Three of its neighbors . . . are indeed a little higher, but no other peak in the world makes such good use of its height.”

Later he admitted that it was “mad” for his small party of amateurs to attempt to climb it, and that personally he sympathized with an old Indiana farmer who came late to a lecture in which the exploit was recounted. The old gentleman took a front seat, listened with much interest, but at last could stand it no longer and in a loud whisper, audible throughout the auditorium, asked his neighbor, “what the devil were they up there for?”

The answer, of course, was to be found in the nature of the man himself. As his party rested in the Swiss village of Zermatt at the base of the Matterhorn, Dr. Jordan recounts that “that mountain hung over our heads, and dared us to come.”

The leader is the man who when the mountain dares him to come is both ready and eager to respond. The era of imagination provides the Fellows of the American College of Dentists new peaks of opportunity. As leaders I know they will respond.
CONCERNING THE IMAGE OF DENTISTRY. WILLIAM L. McCracken, D.D.S., M.S., 701 Comer Drive, Birmingham 16, Alabama.

I have had an opportunity to read the paper by Mr. Martin S. Hayden entitled, “An Editor Looks at Dentists” which was presented as part of a panel on “The Image of Dentistry” at the American College Convocation in Atlantic City.

If publication of this paper in a future issue of the Journal is contemplated, I would like to express my objection to this unfair criticism of the dental profession.

In the first place, the author is obviously only sketchily informed regarding dentistry. Moreover, the paper is obviously slanted in the direction of the author’s advisors and reflects a biased personal opinion.

If I were to be asked, for example, to write a paper on the subject of “The Public Image of the Newspaper Editor” for presentation before a national meeting, I would first ask, “What do you have in mind?” or, “What do you want me to say?” The reply would inevitably influence my approach to the subject. My research would necessarily be limited to a perusal of trade journals and I would have to draw upon my limited personal experience and opinions because, you see, I really know very little about newspaper editors.

Mr. Hayden has attempted to compare the image of dentistry with the much older profession of medicine, with its ever-present implications of life and death drama. There can be no comparison with the drama of saving life and dentistry has far too long attempted to identify itself with the aura of the sterile gown and the surgical operating room. The image of dentistry, if there is such a thing, is good, and has been created not by those who would mimic medicine but by those who have merited the respect of the public by their professional skill and personal interest in their patient’s welfare.

I have lived in the Detroit area and I know that the dentist there is often more highly regarded than many of his medical colleagues who have learned to utilize auxiliary personnel to such an extent that patient contact is all but lost. Currently we are hearing and reading frank criticism of this trend in medical practice. Why then should dentistry feel a need to do likewise?

The criticism that dentists do not find time for community endeavor comparable to those in other occupations further reflects a lack of understanding of the nature of dental practice. In many fields, those who are active in community affairs are, in effect, paid to do so for purposes of public relations. A portion of their salaried time is expected and encouraged to be used for this purpose.

Others (without detracting from their sincere desire for community service, and without commenting on the business value of having their name before the public) are free to do so because the nature of their business permits time away from their business without financial loss. Mr. Hayden would have done dentists a service if he had pointed out that a dentist is paid for what he does rather than what he sells and regardless of personal desire to do otherwise, he cannot engage in outside activities during office hours without serious sacrifice of professional income and quality of service to his patients.

Lastly, Mr. Hayden has done an injustice to those in dentistry who, despite the above mentioned limitations, have contributed greatly to their communities
in both civic and church affairs. I cannot believe that dentists in the Detroit area are different; I know they are not. I know of a member of the dental faculty in Ann Arbor, Michigan, who has contributed of his time for many years toward the growth and development of his church without thought of whether or not he has received public recognition for his service. My own father in Illinois, also a dentist, served many years as president of the school board, in Boy Scout activities, on the Tuberculosis Board for the county, thirty active years and past president of a community service organization, and has always been a leader in church affairs. I suggest that Mr. Hayden inquire of the people in that community of the “image of dentistry.” His opinions could not help but be revised upwards.

Examples such as these can be repeated over and over in cities such as Birmingham, Alabama, St. Louis, Missouri, and Colorado Springs, Colorado. I know because I have lived in each of them. The “image of dentistry” has been portrayed most inaccurately and unfairly by Mr. Hayden. I trust that my objections will be published and thus refute in part the “look” that Mr. Hayden has given to dentistry.

A department under this heading was initiated in Volume 1 (1934) of the Journal by William J. Gies, then the editor. It is continued occasionally as circumstances permit. Members of the American College of Dentists are invited to submit discussions for publication. Owing to limitations of space, contributions for this department should be brief and direct.

### CALENDAR OF MEETINGS

#### CONVOCATIONS

- **November 8, 1964**, San Francisco
- **November 7, 1965**, Las Vegas
- **November 13, 1966**, Dallas
- **October 29, 1967**, Washington, D.C.
- 1968, Chicago
PHILIP E. BLACKERBY, JR. (page 227), a former Regent of the American College of Dentists, this year has served as president. He is Director of the Division of Dentistry, W. K. Kellogg Foundation, Battle Creek, Michigan.

WALTER J. PELTON (page 228), after a career in the U. S. Public Health Service, is Professor of Dentistry (Community Dentistry) at the University of Alabama School of Dentistry, Birmingham.

JOHN S. MILLIS (page 231) is a physicist with the Ph.D. degree, and President of Western Reserve University, Cleveland, since 1949. He has been Master at Howe Preparatory School (Indiana), teacher at Lawrence College, and president of the University of Vermont. A partial list of his other activities includes: consultant to the Science Information Council, the Science Information Service, the National Science Foundation, and the U. S. Office of Vocational Rehabilitation. He is a Trustee of the Carnegie Fund for the Advancement of Teaching. He is about to assume the chairmanship of a Citizen's Committee on Graduate Education at the invitation of the American Medical Association.

MARTIN S. HAYDEN (page 239) is a native Michigander, a graduate of Culver Military Academy and the University of Michigan. He is editor of The Detroit News. In his newspaper career he has had numerous foreign assignments: Japan, China, the Philippines—1936; Berlin foreign ministers' meeting—1954; Poland and Geneva—1955; the Hungarian uprising—1956; and the Bermuda Conference—1957. He served in the Army in 1942-1945, rising from a 2nd Lieutenant to Lieutenant Colonel; he commanded a battalion in the Omaha Beach landing of June 8, 1944, and was decorated with the Bronze Star Medal and the Normandy Beach Arrowhead. He is active in Detroit community affairs—a trustee of Harper Hospital, and Chairman of the Board of Cranbrook School for Boys.

MRS. GOLDIE KRANTZ (page 247) has been interested for a long time in the organization of dental care plans—on the West Coast, in Alaska and Hawaii. She has written widely on the organization of medical care services, prepaid dental care, and multi-phasic screening. From 1949 to 1962 she was Administrator of the ILWU-PMA Health and Welfare Program. (The initials refer to the International Longshoremen’s and Warehousemen’s Union, the Pacific Maritime
Association.) She has served as lecturer at the School of Dentistry and the School of Public Health of the University of California. Currently she is Staff Analyst to the Group Health Association, Washington, D. C., yet retaining consultancies with the Pacific Maritime Association, the Division of Dental Public Health and Resources of the USPHS, and the Hawaiian Employees Council.

D. B. Varner (page 257) is Chancellor of Oakland University at Rochester, Michigan. This is a new undergraduate educational institution that has initiated an experimental program designed to recognize the essential nature of continued learning.

William R. Patterson (page 266) practices in Texarkana, Arkansas. He has written considerably on the challenge of continuing education in dentistry; he wrote one of the Special Studies for the Commission on the Survey of Dentistry. He has been active in continuation programs of the University of Tennessee College of Dentistry, the Tennessee State Dental Association, and the Arkansas State Dental Association.

David F. Striffler (page 272) is Associate Professor of Dentistry (Community Dentistry), and Associate Professor of Public Health Dentistry in the School of Public Health, at the University of Michigan. He has been active in experimenting with continuing education programs in New Mexico and the Southwest.

Robert Thoburn (page 276) has been active in the administrative affairs of dental organizations. He is a member of the Florida State Board of Dental Examiners.

Kenneth V. Randolph (page 283) is Dean of the School of Dentistry West Virginia University, and Professor of Operative Dentistry.

Herman B Wells (page 289) is Chancellor of the Indiana University at Bloomington, and President of the Indiana University Foundation.

William L. McCracken (Page 295) is Professor of Dentistry (Prosthetics) at the University of Alabama School of Dentistry, Birmingham.
# Past-Presidents

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Peterson, O. L. Medical Care in the U. S. Scientific American 209:19, August 1963.


