A publication promoting excellence, ethics, professionalism, and leadership in dentistry

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Mission

The Journal of the American College of Dentists shall identify and place before the Fellows, the profession, and other parties of interest those issues that affect dentistry and oral health. All readers should be challenged by the Journal to remain informed, inquire actively, and participate in the formulation of public policy and personal leadership to advance the purposes and objectives of the College. The Journal is not a political vehicle and does not intentionally promote specific views at the expense of others. The views and opinions expressed herein do not necessarily represent those of the American College of Dentists or its Fellows.

Objectives of the American College of Dentists

The American College of Dentists, in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals.

A. To urge the extension and improvement of measures for the control and prevention of oral disorders;
B. To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all, and to urge broad preparation for such a career at all educational levels;
C. To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;
D. To encourage, stimulate and promote research;
E. To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;
F. To encourage the free exchange of ideas and experiences in the interest of better service to the patient;
G. To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public;
H. To make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge the acceptance of them;
I. To encourage individuals to further these objectives, and to recognize meritorious achievements and the potential for contributions to dental science, art, education, literature, human relations or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.
History of the ACD

6 Organizational Meeting
12 Early Statement of Purpose
14 Commission on Journalism
18 Reporting Policy through the Journal of the American College of Dentists
22 The Mace and Torch
25 A Tribute to William J. Gies
27 Research Institute
29 Survey of Dental Students

Issues in Dental Ethics

42 Ethics and Professionalism: The Past, Present, and Future

Henry Chalfin DDS, FACD

Departments

2 From the Editor
Commercialism in Dentistry and Its Victims

4 Readers Respond
Letters to the Editor

48 Leadership
Performance

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Commercialism in Dentistry and Its Victims

The victims of commercialism in dentistry are not who you might think they are. It is dentists and dentistry generally who suffer from this recent turn toward concern for excess profits. I have some good news and some bad news about commercialism in dentistry. First the bad news: dental commercialism is conspicuously on the rise. Now the good news: dental commercialism is rising conspicuously. Commercialism has brought dentists and patients new products and procedures that are less technique-sensitive, more forgiving, and faster, and has introduced an element of choice into dentistry that did not exist even a few decades ago. The business infrastructure has grown in size, strength, and sophistication to a point where dentists can reap the benefits of efficiencies (especially auxiliaries and young dentists working as associates and employees), earn sufficient incomes to justify the investment in their training, enjoy the potential to accumulate substantial wealth, and market their practices all the way to franchising. The upside of commercialism has always been the opportunity it offers to improve the lots of those who agree to focus on what they do best and then exchange with others.

But enough of this cheerful talk about commercialism. Its dangers are tied as close to its benefits as the shore is to the ocean. The dark side of commercialism includes taking advantage of others because of superior market position or asymmetries in information, thus distorting what society at large would regard as a fair distribution of resources, and subordinating a relationship based on trust and common goals to one based on negotiated, competitive self-interests.

The American College of Dentists and the ADA recently sponsored Ethics Summit IV on Commercialism in Dentistry. A full report is being prepared, but a surprising twist will be previewed here. The victims of commercialism in dentistry are not who you might think they are. It is dentists and dentistry generally that suffer from this recent turn toward concern for excess profits.

If we identify the victims of commercialism as those who get less than they are entitled to because of market manipulation or abuse of specialized knowledge, dentistry is getting a bum deal. We are returning to the bad old days a hundred years ago when “slickness,” “extravagance,” and “hucksterism” were admired.

Participants in Ethics Summit IV, which included individuals from about forty dental organizations, focused hard on the danger of commercial cherry-picking of patients—emphasizing high-profit services while ignoring comprehensive care. This will fragment the profession and give voice to those seeking increased regulation of the profession. I am confident the ADA is working to address the patient side of the commercialism threat through considering a Patients’ Bill of Rights and Responsibilities that would emphasize every patient’s opportunity for compe-
tent, comprehensive, continuous oral health care based on informed consent.

Dentists should have the same relationship with those who have their credit card numbers. This point emerged clearly in one of the exercises at Ethics Summit IV. Participants identified the number one pressure for dental commercialism as being “near dental” in nature—product advertising, continuing education, consultants, and even commercial activities of organized dentistry. The common message directed at dentists from these sources is “You too, Doctor, can be a huge success if you will just give your patients what we have to sell you.”

Certainly there are high-quality continuing education courses, upright firms in industry, and consultants who are not interested primarily in making dentists financial successes. But I believe we have underestimated the extent to which dentists are the victims of commercialism. Spend ten minutes really looking at the ads in any stack of dental publications. The proportion that even suggests having something of value to the patient (as opposed to the dentist) will be puny. Would you let your patients read these? There are several publications that feature the “practice of the month.” Everything touted in these awards can be had from a catalog or contractor. I have yet to see one containing a picture of a patient, let alone a summary of the oral health impact of the practice in the community that supports it.

I visited a dentist recently at the request of other dentists in his community. This individual has every toy that is for sale. My per diem does not allow me to stay in hotels as nice as his office. He advertises in the paper the names and titles of his celebrity patients. Does this dentist have high-end equipment in order to treat high-end patients in order to make money? I happen in this case to know his net is small. I think the truth is the other way around: he needs high-end patients to justify his runaway spending on the trappings of cutting edge dentistry. I see him as a victim of commercialism.

As long as the appearance of success can be purchased, with the costs passed though to the public, there will be commercial interests at the elbow of dentists to appease this need.

The ending note, however, must be positive. The ADA is on the case in a constructive fashion. And the dental schools are not yoked in with the near-dental forces of commercialism. They have an inoculating effect. At the school where I teach, about 15% of seniors describe their ideal practice as either “high-end” or “high-tech.” The remainder is evenly divided among specialization, the traditional family-oriented comprehensive practice, and sharing time between traditional practice and outreach or clinics for the underserved. A recent survey of all graduating seniors in American dental schools found that “earning a high income” was the third most powerful motive for choosing dentistry, behind serving others and finding the work of dentistry interesting.

There are those who would snicker at the idealism of the young men and women coming into the profession today. “Just wait,” they say, “until they discover that they don’t have enough money to support the lifestyle they expected.” Dangerous thinking—“enough” has never been a very precise term in dentistry. Disappointing thinking—much better to go out and show these folks who have the future of the profession in their hands how to avoid becoming victims of commercialism.

David W. Chambers, EdM, MBA, PhD, FACD

Editor
Letters to the Editor

Dear Sir:

Timothy Oh’s article in the fall 2005 issue of JACD should speak to us all. It should speak to dental board examiners nationwide saying that we are long overdue for a change in the way we do business. It is no longer a “states’ rights issue,” the old familiar dodge on why we can’t change the process. It is an issue that has profound effect on thousands of young professionals across the country every year. Many wonder why our parent organization does not take a more definitive stand on this. I wonder, as a member of the College for almost twenty years, why the College also sidesteps this problem. For an organization that prides itself on promoting ethical professional behavior and fairness, we have fallen far short in trying to change an archaic, outmoded process for deciding who practices and where.

Our medical colleagues are light years ahead of us in licensing their members. Are we so different from them that we could not use the same methods? I cannot remember a general surgeon who demonstrated his surgical skills to a panel of examiners by removing a gallbladder from a live patient. Until the recent dental graduate can apply to any state for licensure, take a jurisprudence examination, pay a license fee, and obtain a license to practice, we have not come very far. Dental examiners nationwide are still practicing a process of exclusion by subjecting the recent graduate to an unfair, unethical examination that can be passed or failed on any given day.

Our leadership should listen to young people like Timothy Oh. Echoing the sentiment in the caption under his picture, I also wish him well in his upcoming state board examinations.

Ray D. Berringer, DDS, FACD
Gainesville, FL

Sir:

I must write to respond to the feature by Dr. Ivan Lugo in the fall 2005 issue of the Journal.

I hate to be politically incorrect, but this whole business of “diversity for diversity’s sake” has gotten out of hand. I agree with the ADA policy of “increased access to education for all qualified and motivated students,” but how does this get translated into accepting students based on their ethnicity? There are social pressures to become healthcare professionals on those ethnic students who are qualified and motivated. It is up to us to assure that there are pathways available for them. If so, the numbers will equalize with time. If instead, we recruit based on achieving diversity, some of the minority students having the “inside track” will lack the quality and motivation to make them successful in private practice.

This phenomenon, already present, is alluded to in Dr. Lugo’s paper. His assertion that minority dentists earn less in private practice simply because of their ethnicity is an example of confusing associations with causal relations. Are those minority dentists earning less because of their ethnicity or is it because of where they practice? If the latter, income is relative to living expenses. Or is this the result of their quality and motivation? There are many minority dentists in our area who do as well or better than the typical dentist. I hate this kind of labeling—dentists are dentists, period!

A daring “jump to conclusion” by Dr. Lugo is his assumption that only minority dentists can effectively care for minority populations. The Kellogg Foundation, which he quotes, is terribly wrong in this conclusion. To say that only Hispanics can properly care for Hispanic populations or Blacks for Black populations is the ultimate in racial bigotry. If I were to say that I could only care for Caucasians of Italian extractions I would be run out of town as a racist.

Dr. Lugo’s final assertion that we must address equity issues for gay, lesbian, and disabled individuals goes
too far. The sexual orientation of dentists should be a non-issue. Dentistry should address oral health issues not advance a social agenda. While the Americans with Disabilities Act requires that reasonable accommodations be made if there is a chance that individuals will compensate for deficiencies, there are some disabilities that cannot be accommodated. Where does the quest for diversity end?

Let's get back to the ADA policy without the trappings of political correctness. Dental education should be available to the best, brightest, and most motivated. Barriers should not be placed in the way of any who meet these criteria. That is the only way the United States will maintain its position as the preeminent dental care provider in the world.

Robert J. Gherardi, DMD, FACD
Albuquerque, NM

Author's Response

Diversity is not about political correctness. It is about law and sound business decisions in a nation where rapidly changing demographics make diversity the norm. The Office of Personnel Management of the Federal government agrees: “Workforce diversity has evolved from a sound public policy to a strategic business imperative.” (www.leadership.opm.gov).

The American Dental Association and the American Dental Education Association both have diversity as one of their core values, with the ADA saying, “Diversity adds value to our community and work.” (www.ada.org).

The largest Fortune 500 companies have made a commitment to diversity as part of a commitment to increasing the bottom line. The top 50 companies in commitment to diversity according to Diversity Inc. include Colgate-Palmolive, Coca-Cola, Verizon, Merck, Kraft, and more.

Dr. Gherardi’s state, New Mexico, prohibits discrimination on the basis of sexual orientation or gender identity (HB277).

Our profession’s commitment to furthering the nation’s oral health is aided by a commitment to a diverse workforce, one that is gained by paying conscious attention to the demographics of our schools and our workplaces.

R. Ivan Lugo, DMD, MBA, FACD
Philadelphia, PA

Erratum

Our President, Dr. Marcia Boyd, was inducted into the College in 1987, not 1994 as stated in the “President-elect’s Address.” We apologize for any confusion this may have caused.
By more than a decade, the American College of Dentists is this country’s oldest honorary organization for practicing dentists. The International College of Dentists was proposed to the Federation Dentaire International in 1926 and held its first convocation in 1930. The Pierre Fauchard Academy was organized in 1936. In 1974, the Academy of Dentistry International was created to sponsor continuing education and mission work on a global basis.

The founding of the American College of Dentists is dated from August 1920. The minutes of the organizational meeting are reproduced below.

AMERICAN COLLEGE OF DENTISTS
A meeting for the purpose of organizing the American College of Dentists was held at the Copley-Plaza Hotel, Boston, Massachusetts, August 20-22, 1920.

AUGUST 20—FIRST SESSION
The meeting was called to order at 10 A.M. by Dr. John V. Conzett, Dubuque, Iowa, President of the National Dental Association [name at the time of the American Dental Association].

Dr. Otto U. King, Chicago, moved that Dr. Conzett act as temporary chairman.

Seconded and carried.

Dr. C. N. Johnson, Chicago, moved that Dr. King be elected Secretary Pro Tem.

Seconded and carried.

The Chairman presented the following names of men from various parts of the United States who had been invited to attend the organization meeting:

E. A. Johnson Boston, Mass.
H. D. Cross Boston, Mass.
Albert L. Midgley Providence, R.I.
V. H. Jackson New York, N.Y.
M. H. Cryer Philadelphia, Pa
Hermann Prinz Philadelphia, Pa
Clarence J. Grieves Baltimore, Md.
J. F. Biddle Pittsburg, Pa
H. E. Friesell Pittsburgh, Pa
Thomas P. Hinman Atlanta, Ga
M. M. House Indianapolis, Ind.
C. Edmund Kells New Orleans, La.
N. S. Hoff Ann Arbor, Mich.
Chalmers J. Lyons Detroit, Mich.
William A. Giffin Chicago, Ill.
Thomas L. Gilmer Chicago, Ill.
C. N. Johnson Chicago, Ill.
Frederick B. Noyes Chicago, Ill.
Otto U. King Chicago, Ill.
Arthur D. Black Milwaukee, Wis.
H. L. Banzhaf Minneapolis, Minn.
Thomas B. Hartzell Iowa City, Ia.
R. H. Volland Dubuque, Ia.
John V. Conzett Council Bluffs, Ia.
Charles E. Woodbury San Francisco, Cal.
Guy S. Millberry Los Angeles, Cal.
Julio Endleman Rochester, N.Y.
Harvey J. Burkhardt Los Angeles, Cal.
John P. Buckley

Those in attendance when the meeting was called to order were Drs. Conzett, Cross, Midgley, Jackson, Biddle, Friesell, Kells, Johnson, King, Banzhaf, Hartzell, and Volland.

The Chairman read letters from those who favor and are in sympathy with the organization, regretting their inability to be present.

THE CHAIRMAN: Gentlemen, what is your pleasure?

DR. HARTZELL: The mere formation of an association or college like this, without some constructive effort behind it, is absolutely futile. If such an organization can be made constructive so that it will induce men to grow, then I think it is worth while. I should like to ask the committee or someone to outline the purposes of this organization so that I and others may get a clear idea of what it is supposed to do.

THE CHAIRMAN: The plan as it has been evolved in my mind, and as I have tried to elaborate it, is this: During our studies
in the last few years on the problem of dental education, we have become convinced that as dental education is now presented, when a man gets his degree in college, there is no further stimulus or incentive for him to go ahead. There is nothing for him to do, nothing ahead of him, no stimulus to study. There is no precept which will come to a man from professional efforts. He may become President of the National Dental Association if he is a good politician. Some of the best men, who have done the best professional work, have been ignored simply because they have spent their time in laboratories, in operating rooms, and in studies and have not gotten out among men, and are not good mixers, and the National Dental Association has passed these men by. Such an organization or college as we contemplate organizing is important for two reasons: First, to bestow a degree upon men for meritorious work and who have accomplished things for the profession. Fellowship in such an organization would be an honor to them in recognition of the work which they have done. In the second place, Fellowship would be a stimulus to men who have graduated to do research work and bring things out for the advancement of the profession and the betterment of humanity. In a nutshell, that is the idea.

When students receive the degree of Doctor of Dental Surgery, there is no further incentive for them in dentistry beyond the fact of Fellowship in the American College of Dentists, so that men after graduating from college will have the stimulus of doing added work.

In my Presidential Address to the National Dental Association, I am advising the formation of extension working clubs. I have advised the formation of a Dental Study and Extension Club Committee in the National Dental Association, whose purpose will be to formulate a curriculum in the various departments of dentistry, and that syllabi of this curriculum be published, so that the members of any club throughout the country, who desire to study operative dentistry, gold fillings, gold inlays, or anything else, will be able to get syllabi from the central study club. This committee would have capable men placed in charge of the various clubs that may be organized.

For instance, if we wanted to organize a study club for the study of pyorrhea, we would communicate with the central club committee and have them formulate a curriculum on that subject which would be approved by the entire committee. We would have a man capable of teaching that course and put in charge, for instance, Dr. Hartzell, who would come to Dubuque, and that men would take the work under him, and that would be authoritative work.

In addition to that, I am advising that the colleges put in a postgraduate course coordinating with the extension clubs, so that a man who has taken extension work would get credit for it. If a man has taken a sufficient amount of work and has passed a creditable examination, he is eligible for Fellowship in the organization. We must stimulate postgraduate study on the part of men who have graduated from our dental colleges, and stimulate all the men engaged in the practice of dentistry so that Fellowship would only be conferred on them for meritorious work which they have accomplished in their offices, in their studies, in research work, or by their written contributions. If the work of such men is found to be of sufficient value to the profession as to warrant the bestowal of the degree, the Censor Committee, which we hope to appoint, will confer that Fellowship degree.

We have just asked a few men to organize this college, and as I have said before, a great many men worthy of this Fellowship degree have not been asked to attend this organization meeting because we consider it greater honor to confer the degree on them afterward.

What I have said is concisely the scheme which the committee has outlined. Of course, there are details which we have discussed which might be brought up later.

Is there anything, Dr. King, that should be added?

DR. KING: Every man who has been invited to attend this organization meeting believes that there is a place in dentistry for this particular kind of organization, provided we can properly organize and function it as we have out-
lined. Some men have a sort of feeling that we should go slowly in this matter, but the majority of men are with us.

DR. HARTZELL: I have no particular desire to put the brakes on the formation of this organization. I will reexpress my ideas. The mere formation of a College of Dental Surgery, without any plan for constructive growth, is not worth a tinker’s damn. We would only make one more organization to attend and perhaps irritate a group of men who would envy those who are in it and want to be in it, and I would not value Fellowship in it under those conditions. If the organization can be made to stimulate constructive growth, and really induce men to study and do research work who would not otherwise work, then I am in favor of it. Anything that will do that is worth while. If we make that the central idea, such an organization might grow into a splendid thing if it is carefully and capably managed. There are opportunities, however, to create a great deal of heartburn and envy and dissatisfaction in the profession by forming this organization unless it is done from the purely merit system. The opinion Dr. Hoff voices in his letter that the membership be determined in an absolutely impartial way is good. There is nobody doing work in dentistry, or elsewhere, it does not matter what it is, who will not make some enemies wherever he may be. We do not want the idea of making a research organization among men with a great deal of experience. We have had two meetings, and a thing I find in the profession is we can make possible very great work in a body of this kind in the manner in which the Chairman has outlined it. At the present time, as I see it, we are dividing very rapidly into specialties or various branches, and there is not at present a nucleus whereby the leading men of our profession can get together and assimilate the knowledge that is to be gained in the various specialties. Dentistry is becoming such a broad field that a man has no way of keeping up with the rapid advancement. Men are becoming limited in their views in dentistry, because of the fact that they are specializing. They see no need of reading the various articles coming out in the dental journals. We have men in the profession so narrow in thought that they confine themselves to one thing. Such men have a very small part of the truth. We have seen that displayed in our research work in the past two weeks at our meeting [of the National Dental Association]. It seems to me, if this body were to take this matter up as a nucleus for the honoring of men who are leading in all branches of our profession and furnish papers or a program whereby a summing up of the work done could be given in concise, definite form, and published, it would make much less the amount of reading matter for specialists, but it would give the specialists a very good general knowledge of the work that is being done by the other specialties in our profession. It seems to me, anything that could be worked out along that line would be worth while. This is the one body to do that. The organization of our work in the beginning was to get an understanding of what our work was to be. We found that of various men coming together, one man wanted one thing, another man another.

Dr. Wilson’s idea in connection with the work of prosthetic dentistry was that our body should invite all men who are teaching prosthetic dentistry in our colleges at the present time. These teachers are not practitioners, not men who are working out the big ideas. Our idea was for a research organization to disseminate the knowledge gleaned through a body of this kind, and through the getting of these men together and assimilating their ideas, testing the fundamental principles and the application of those principles. We have just now, after two years of work, limited our membership at the present time to 50 for constructive and functioning growth.

We have five committees at work in these various branches. We cannot function well with large committees. However, the men are working in harmony. As we branch out and get where we can handle a larger organization, we can grow from a very small body to a large one. With proper work and right functioning there will be harmony and interest manifested. This organization, it seems to me, can be made a nucleus of very great value, properly thought out.

THE CHAIRMAN: It might be well to get an expression of opinion from the different men present.

DR. VOLLAND: I am very much in favor of this organization. The thing that appeals to me in this whole scheme is that the undergraduate scholarships, fraternities organized in liberal arts and dentistry, are a stimulus to undergraduates.

The Phi Beta Kappa and Sigma Psi and literary and scientific undergraduate colleges are a decided stimulus to the right kind of men. It seems to me, this creates the same type of stimulus of graduates. Personally, I am very much of the opinion that the simpler our machinery, and the easier it is for the administration of affairs from a common sense standpoint within the organization, the better we are going to be off, just as the Phi Beta Kappa has a long constitution which answers the purpose admirably and gives the Board of Censors or Directors of Phi Beta Kappa
an opportunity to select men according to certain definite rules, and the organization is harmonious and effective. And so I believe in scholarship fraternities in medical colleges and in dental organizations. I think they would prove a decided stimulus, so that I am in favor of this organization, but as Dr. Hartzell has pointed out, we just make haste slowly.

DR. BIDDLE: There is another point to think about. I have not much time to give it consideration. I have listened to the various remarks that have been made, and I would like to know if you have a Constitution already prepared?

THE CHAIRMAN: We have one outlined. We will submit this, which is largely taken from the American College of Surgeons, and adapted to our particular use. We are simplifying it as much as possible. We do not want to have a cumbersome Constitution, or By-Laws. We want to set forth our purposes and objects as succinctly as we possibly can without cumbersome machinery.

DR. BIDDLE: Would it not be advisable to hear that Constitution?

THE CHAIRMAN: We will have it read a little later.

DR. KELLS: I think the dentists themselves require some stimulus. The view in our section is that this college will do for the dental profession what the American College of Surgeons has done for the medical profession, and it seems to me it is a good thing.

DR. BANZHAF: I think the establishing of a Fellowship in dentistry is a very good one. I want to continue the thought expressed by Dr. Volland, and by Dr. Biddle. If we should have a Constitution that is simple, and one not to be misinterpreted, in order that the administration might be on a just and efficient basis, it seems to me that is the first thing to see to. In the medical profession they have learned some things about operation of their Fellowship in the last few years which they did not anticipate when it was organized, which is largely of a political nature I believe. If I may speak frankly here, I would like to urge the wisdom of keeping out of anything that savors of political advantage to anyone. In the administration of this Fellowship, the organization should be entirely upon the merit basis.

DR. HOUSE: I would like to approve the remarks just made by Dr. Banzhaff. That is exactly the idea I have of any Constitution and By-Laws that may be adopted. They should carefully outline and express the definitions clearly, so that they cannot be misinterpreted. The meaning of each section should be thoroughly understood.

DR. JACKSON: I believe such an organization as we are talking about will be a great stimulus for men to do things. We need more research work. We want more constructive ideas and have them put in such form that we assimilate them, and really I think this movement is in the right direction. If we can analyze and brings our thoughts and opinions to a focus, it would be a stepping stone toward this organization if worked out rightly, and it will bring desirable men into the field. Personally, I see a great future for this organization if it is properly worked out. There should be more study and thought and we should show that we are looking after many things.

DR. CROSS: Such an organization as has been outlined here by the Chairman and others, especially with the modifications suggested, will be of great service to the profession, and I am much in favor of it.

DR. FRIESELL: It is true, today the graduate of recent months is on the same level, so far as any mark of distinction is concerned, with the man who has been an investigator, a leader, and one of the helpers of the profession. It seems to me, there is a need for some mark of distinction with which to reward a man who has done advanced work and with which to stimulate the college and activity of the younger men, so that they may try to place our profession upon a basis far beyond that of the view of the average practitioner, who looks upon it shortly after graduation simple as a particular method of earning a livelihood. The principle is good. Its success will depend upon proper and intelligent management of the organization. If it is a good thing, we should start it, and in starting it should manage it properly.

DR. JOHNSON: Dr. Friesell has just made the statement that the recent graduates are practically on the same status as the man who has given years and years of service and study to his profession. That is not only true, but the fact is true up to this time there has been very little stimulus for young men to look forward to develop their talent, to give them the incentive. This college, organized as it probably will be, will do for dentistry what the American College of Surgeons will do for the medical profession. We can profit by the mistakes that have been made by the American College of Surgeons, if they would be serious to us. We want to eliminate politics. The possibilities of such a college are wonderful, but it is just as Dr. Hartzell has said, unless we can accomplish something
definite, some concrete good, unless we can stimulate the young men who are coming into the profession to do research work, and unless we can make a definite impression upon the profession, it is not worth while. The college will have to be organized very carefully. We must proceed slowly, and we have to make merit count. If we do that, it will not be long before this college will make wonderful and profound impression upon the world at large, just as the American College of Surgeons has done. It would be a great stimulus to the young men. I am heartily in favor of it.

DR. KING: It seems to me, there is tremendous responsibility resting upon this group of men who are assembled here just now as to whether or not this organization is to be a success. In the first place, we seem to be of one mind that there is a need of bestowing honor upon men who have done meritorious work, and that some recognition should be given to them. We know men who have devoted their lives, sacrificed time and money and everything else, to the cause of dentistry. They are poor men today, and nobody has ever recognized their worth. We have never said thank you to them, we have never passed around roses or given them a bouquet. If this college we are organizing here today is made to function properly, it will be a great power for good, and it is up to us to see to it that it is properly conducted. Take those men who have done meritorious work, they have laid the foundation to stimulate other men in the profession, just as the cross road dentists are ready to do meritorious work if they have this stimulus placed before them. I know of several men who are qualified to do a distinct service in dentistry if they can receive special credit a little later on. These men will probably spend another year or two in college to receive this degree, and I think the object and aim of this organization are really worth while, and the dental profession is at the cross roads in meeting this need of the profession of bestowing honor on those who have already done meritorious work, and the organization should start out with the distinct understanding that this will be a college, leaving out all politics. We are organizing today the American College of Dentists which is affiliated with nothing. It has no affiliation with anything else. If we can make this organization count in the beginning we will be doing a great deal for the future of dentistry.

DR. HARTZELL: I have somewhat different ideas from Dr. King. Dr. Johnson and every other man like him has received and is receiving reward for his work in the love of his fellow men in the profession, and there is no reason for creating an honor organization to honor older men in the profession, and if that were the central idea I would not be much interested in it. The principle function of this little group is to create something that will stimulate growth, and if it won’t do that it is not worth much. The function of the dentist is to save teeth and to save life itself. It is just as important as internal medicine, and the men who are practicing dentistry today in my opinion are internists of the first class.

DR. JACKSON: They should be mentally trained for the work.

DR. HARTZELL: I would like to see in the purpose of this creation the type of stimulus applied that would broaden dentistry to become what it is already, a part of medicine, and not limit it to the teeth.

THE CHAIRMAN: That is one of the central thoughts, and I am mighty glad you have called attention to it.

DR. MIDGLEY: There is very little that I can add to what has already been said. I think the remarks of Dr. Volland in relation to scientific societies and other societies are not a sufficient reason for this organization. I believe that there should be absolutely no affiliation with anything else in dentistry. I am particularly concerned now in the method of creation of this organization. With that in mind I think of its aims and purposes from a fundamental, truly professional, scientific standpoint of organization, I want to be enlightened on the method of creating this organization for the reasons stated by Dr. Friesell and Dr. Banzhaf.

THE CHAIRMAN: What do you mean?

DR. MIDGLEY: You read a letter from a gentleman to the effect that this organization should be under the supervision of or come from the national organization.

THE CHAIRMAN: We took that matter up in the committee, and I do not think it is wise at all to tie it up with the National Dental Association. The minute we do that we make a political machine out of it. What we want in this organization is to make a wholly professional organization having two important functions, the one of awarding to men who have done meritorious work a mark of distinction, and the greater function, as Dr. Hartzell has emphasized, the stimulus which will be given men to do better and greater work, and these things can be worked out.

DR. HARTZELL: I do not want in anyway to detract from the honor that should be given to men who have done meritorious work. We want to do honor to
them. That is a secondary matter to the creation of something that will make and stimulate growth.

THE CHAIRMAN: We all appreciate what you have said.

DR. KING: I appreciate what Dr. Banzhaf’s college has done for some men in the last year or two, and what Dr. Frisell’s college has done in giving them special recognition. I also appreciate what Harvard University has done and is doing for those who have done meritorious work. In the last three years the university council took up the matter of special degrees. I looked into the history and records of those entitled to the particular degrees they wanted to bestow, and I know how these men appreciate this movement. That is the standpoint I was trying to magnify in my previous remarks of bestowing honor upon men who have done meritorious work.

THE CHAIRMAN: I do not think there is any question but that we are all of one mind when we get these things threshed out. This is to be professional organization absolutely, with distinction conferred on those who merit it. One way suggested by the committee to check that up was that a book should be published by the college in which the name and activities of every member of the college should be inscribed, so that there would not be any question of men getting across except by merit along, and it is the only thing that this organization has to go by in honoring men who have accomplished something.

If it is your desire, I shall be glad to entertain a motion that we proceed to the organization.

DR. HARTZELL: I move that we proceed to organize the American College of Dentists.

Seconded and carried.

Dr. Friesell nominated Dr. John V. Conzett, Dubuque, Iowa, as President. The nomination was seconded by several, and the Secretary Pro Tem was instructed to cast one ballot for Dr. Conzett. The Secretary cast a ballot as instructed, and Dr. Conzett was declared elected President.

Dr. Conzett thanked the members for the distinguished honor they had conferred upon him, and he assured them he would serve to the best of his ability.

The following officers were nominated and declared duly elected: Vice-President, Dr. H.E. Friesell, Pittsburgh, Pennsylvania; Secretary, Dr. Arthur D. Black, Chicago, Illinois; Treasurer, Dr. C. Edmund Kells, New Orleans, Louisiana.

A Committee on Constitution and By-Laws was appointed, consisting of Drs. John V. Conzett, H. E. Friesell, C. Edmund Kells, Arthur D. Black and C. N. Johnson.

THE CHAIRMAN: This committee will make its report Sunday morning at 10 o’clock.

DR. VOLLAND: I move we adjourn until 10 o’clock Sunday morning, August 22. Seconded and carried.

The meeting thereupon adjourned.
Early Statement of Purpose

The American College of Dentists was founded for young men of science. The constant reference to “men” in the early writings appears jarring now, but at the time the College was founded dentistry was almost exclusively a male profession. The call to science reflected the fact that dentistry was fighting to establish itself as a profession in a world where commercial interests were rampant. What may be the greatest surprise is that the College was originally intended to attract the youngest members of the profession, particularly those interested in science. In the early years there was a separate category of membership for those “who had been in practice ten years or longer.”

This material was excerpted from College documents describing early standards.

The American College of Dentists

This body has for its object the establishment in dentistry of the same ideals that are represented in medicine by the American College of Surgeons. The preliminary organization took place at Boston in August 1920, and it was perfected in Milwaukee in August 1921. A statement of its objects, coming officially from its founders, is as follows:

“Every important profession, science or art has its Academy, Legion, or Court of Honor, to which are elected, or appointed, those who have unselfishly devoted themselves to the advancement of each specific cause. This has been done not only as a just recognition of meritorious services, but also as an example to younger members that they may be encouraged to nobler efforts.

“Recognition of the need of a similar influence in dentistry has resulted in the establishment of the American College of Dentists. The object of this College is to bring together in a group men of outstanding prominence in the profession and by their united efforts in a field that is not now covered by any dental agency to endeavor to aid in the advancement of the standards and efficiency of American dentistry. Some of the aims of the College are to cultivate and encourage the development of a higher type of professional spirit and a keener sense of social responsibility throughout the profession; by precept and example to inculcate higher ideals among the younger element of the profession, and hold forth its Fellowship as a reward to those who faithfully follow such ideals; to stimulate advanced work in dental art, science and literature; and to honor men who have made notable contributions to the advancement of our profession.

“The enormously increased responsibilities of the dental profession to humanity, on the one hand, and the unprecedented opportunities for exploitation, which have resulted in a wave of mercenary practices that threatens to become a public scandal to the everlasting disgrace of American dentistry, on the other hand, demand that those elements of the profession, whose character, reputation and professional attainments point them out as leaders, should be brought together for the purpose of checking the tide of destructive agencies and of encouraging by every laudable means the cultivation of that high spirit of professional and social responsibility, the wholesome influence of which is so greatly needed.

“Inasmuch as there is no title or mark of distinction to differentiate the recent graduates from the practitioner who has devoted many years of faithful effort in the upbuilding of his profession, it is proposed that the Fellowship of the College shall be conferred upon two groups of practitioners, viz:

“1. Upon those members of the profession who have been at least ten years engaged in the practice of dentistry whose efforts during that time have been loyalty devoted to teaching in dental schools, to presenting papers
or clinics before dental societies, or to organization and executive work of a constructive character, as well as public services or civic duties having a tendency to enlarge the usefulness or the public appreciation of dentistry, shall be taken into consideration when passing upon candidates of this group.

“2. The conferring of Fellowship shall be held out as a stimulus to young men to induce them to engage more earnestly in those activities which tend to advance dentistry as a profession and for which monetary remuneration must necessarily be sadly out of proportion to the time and effort expended. Devotion to teaching, especially in the non-clinical branches; to research work and to public education as well as advanced work in the art, science or literature of dentistry, should be greatly encouraged as a consequence of this movement.

“The candidate for Fellowship in either class must be of good moral character, and have a reputation for ethical conduct and professional standing that is unquestioned, personality, integrity, education, unselfishness, high professional ideals, as well as freedom from mercenary tendencies, shall be considered in evaluating the qualifications of all candidates for Fellowship.”

It will be seen by the foregoing that the ideals set by this organization are the highest order, and if they are maintained—as undoubtedly they will be—membership in the College will be a coveted prize for which every progressive and earnest worker in dentistry will strive. It is a goal toward which the young man of unusual application and ability may legitimately aspire, and once having attained it he will receive added incentive to achieve greater and still greater things, to the end that the whole profession may be advanced, not only in its technical knowledge but in its ideals as well.

Some such organization as this is needed in our profession to act as stimulus to men both before and after graduation, that they may have something to look forward to beyond the mere acquirement of a College diploma, or a state licensure to practice.

Dentistry has developed for the most part as a result of the impetus given to it by men of outstanding enthusiasm and initiative by a few men in fact, who have been impelled by the sheer force of their own genius and their inherent love of the work, without other incentive then the mere fact of doing it.

Now that this College has been organized, it offers a means whereby original research or individual effort may be recognized in such a way as to constantly bring out the best there is in men, with the assurance that there is an authoritative medium for its recognition and an encouraging hand held out to sustain them.

“The candidate for Fellowship in either class must be of good moral character, and have a reputation for ethical conduct and professional standing that is unquestioned, personality, integrity, education, unselfishness, high professional ideals, as well as freedom from mercenary tendencies, shall be considered in evaluating the qualifications of all candidates for Fellowship.”

It may be added without breach of confidence that it is not the intention of the founders to build up an organization rapidly, nor to induce large numbers to seek Fellowship at once. It is deemed the wiser and safer plan to proceed slowly and carefully, building along conservative and substantial lines which shall insure such an organization that men will eventually be proud to belong to it. Not that it is in any degree a closed corporation, nor that it is exclusive except in the fact that men must have achieved something to belong to it, and be willing to achieve more. In fact, it is wholly democratic in the sense that the humblest worker in the dental ranks may aspire to membership provided he evolves something of a signal service to his profession or to humanity.

The American College of Dentists was not organized with any ulterior motive but as a means of promoting advancement in dentistry, and adding attractiveness to study and application.
Abstract of the Final Report
Denver, Colorado
July 20, 1930

Consistent with its founding vision to actively engage in raising the standards of the profession, the College took on, as its first major project, the reform of dental journalism. In the early part of the last century, dental journalism was dominated by for-profit considerations. Four years of committee work resulted in the publication, in 1932, of a 240-page book, The Status of Dental Journalism in the United States, by the College. Also flowing from this effort was creation of the American Association of Dental Editors, establishment of a fund to support the work of William Gies as editor of the fledgling Journal of Dental Research, and passage of policies and state practice acts that substantially curbed the influence of commercial concerns in dentistry.

The following material is the 1930 abstract of the ACD Commission on Journalism.

Your Commission of Journalism, since presenting its previous report at Washington, D.C., in October 1929, has continued the study of the various problems related to independent dental journalism and has progressed in the survey of dental periodicals.*

We have been in correspondence with the secretaries of all the state dental societies, the secretaries of all the state boards of dental examiners, the deans of all the dental schools, and the editors of all the dental periodicals in the United States. Consequently, much statistical information has been accumulated. These data, plus the facts gathered from an analysis of the periodicals, and the conclusions drawn from our study of the dental status of dental periodic literature, have given the Commission the material on which it is preparing its final report in a form suitable for publication.

The Commission’s work and its accumulated statistics are so extensive that it would not be feasible to make a detailed presentation in the limited time available at a convocation of the College. Therefore, although the Commission’s conclusions and recommendations will be presented in full, the main body of the report will be offered only in outline, as follows:

I. Introduction
A. American College of Dentists dedicated to the advancement of the profession of dentistry.
B. Recognition of deficiencies in dental journalism.
C. Resolution creating the Commission on Journalism.

II. History of Dental Journalism
A. Early status of the dental profession.
1. Indefinite future of dentistry.
2. Profession limited in numbers and in financial resources.
3. Lack of effective organization.
4. Educational and statutory deficiencies.
5. Charlatanism rampant.
6. Comparison with condition in medicine.
B. Early periodicals in dentistry.
1. Their necessity recognized.
2. Ownership of early periodicals.
3. Careers of early periodicals.
4. Comparison with medical journals of the same period.
C. Dental journalism through the succeeding decades.
1. Early recognition of disadvantages of trade-house journalism.
2. Efforts to create independent journals.
3. Causes of the failures.
4. Role of dental supply-houses.
5. Intermittent periodicals of activity in behalf of independent journalism.
6. Dental society resolutions on dental journalism.
7. Trade journalism in medicine.
III. Evolution of the Relationship Between the Dental Profession and the Dental Trade Corporations

A. Acknowledgment of achievements of dental commercial houses.
B. Early relationship.
C. Non-altruistic “philanthropy” of trade-houses through the years.
D. Pauperizing effect of trade-house paternalism.
E. Current intrusion into professional affairs.
   1. Dental journalism.
   2. Dental education.
   3. Dental research.
   4. Dental organizations.
   5. Dental economics.

IV. Journalism in relation to the Future of the Dental Profession

A. Professional ideals and ethics.
B. Public health.
C. Medico-dental relationship.
D. Educational standards.

V. Salient Findings

A. Present status of dental periodical literature.
   1. Literature of 1928 and 1929, in:
      a) Professional periodicals.
      b) Trade-house periodicals.
      c) Commercial periodicals.
      d) Publication-house periodicals.
      e) Dental-college periodicals.
      f) Fraternity periodicals.
      g) Miscellaneous periodicals.
   3. Appraisal of the advertising pages of current dental periodicals.
   4. Tabulation of data on dental periodicals in 1928 and 1929.
   5. Obvious needs and opportunities for improvement.
B. A bibliography on the subject of dental journalism from 1839 to date.

VI. Conclusions

1. We believe that, as a preliminary groundwork for further advancement of the dental profession, it is imperative that dentists individually should feel and apply a new psychology, embracing an increased self-respect as dentists, and a realization of dentistry’s important function in health-service for the nation. Dentists should be conscious and proud of their opportunity to become part of the broad movement in health-service.

2. Dentistry, because of the importance of its proven relationship to the public health, is entitled to recognition as a dignified and honored profession.

3. For many years this recognition was withheld because of the inadequacy of our education standards and our indifference to the obvious duty of conducting important research. And also as a result of lack of professional dignity, pride, and idealism, as exemplified by the obvious failure of influential dentists, and of many important dental organizations, to realize that certain fundamental differences exist between a profession and a trade.

4. Recently, we have so elevated our educational standards, and so stimulated important dental research, that the condition of these two factors no longer justifies destructive criticism of dentistry. But, despite these advances and the high idealism of many dentists, our profession still suffers from an inferiority complex which is symbolized by this continued willingness to be subsidized and paternalized by a trade that is inherently subordinate to it.

5. Dental-trade corporations, which from an ethical viewpoint should engage only in the manufacture and distribution of dental supplied and in similar lay services, have, with increasing confidence and boldness, been broadening their intrusion into those fields of activity that obviously are wholly professional in character. This zeal for influence, power, and expansion of corporate earnings is evident in the following spheres:
   a) Dental journalism.
   b) Dental education.
   c) Dental research.
   d) Dental organizations.
   e) Dental economics.

6. So long as this demoralizing and pauperizing condition is allowed to continue, and a pachydermatous [callous] dentistry by supine acquiescence makes it impossible to judge where professional control ends and trade domination begins, just so long will dentistry be denied the respect that rightly belongs to it.

7. We believe that the next forward step in our progress in this relation will be taken when dentistry, having become professionally conscious and insistent, sharply defines the limitations of its relationship with the dental trade. This must include the development of independent professional journalism, and the eradication of trade-house control of dental journals.

VII. Recommendations

In the course of this investigation numerous related dental problems have come to the attention of the Commission, and have been treated in the main body of the report. However, we feel that, in consideration of the wording of the resolution adopted by the College in
creating this Commission, we should confine our final recommendation to the subject of dental journalism. With these restrictions in mind, we submit the following recommendations:

1. We recommend an immediate increase in the publishing capacity of the independent journals in dentistry so that the profession may be able to publish all its important current literature in its own periodicals. This development to be brought about by:
   a) Increasing the total number of pages per volume of existing independent periodicals.
   b) Increasing the frequency of publication of existing independent periodicals.
   c) Amalgamation of existing independent dental journals having small circulations and insufficient financial resources into unit journals of strength and importance.
   d) Conversion of historically important trade-house publications into independent journals by negotiations between owners of such periodicals and representatives of responsible professional organizations.
   e) Creation of new independent periodicals by:
      1) Dental societies having large memberships.
      2) Sectional groups of societies having smaller memberships.
      3) Various societies representing dental specialties.
   f) Creation of a journal, to be known as Dental Abstracts, as already approved by this College [today, the official publication of the Pierre Fauchard Academy, but owned and published by Elsevier].

2. We recommend an organization of editors of all the independent dental periodicals [today, the American Association of Dental Editors] to further the cause of independent journalism, which could be accomplished by mutual agreement to:
   a) Insist upon a higher types of dental literature by eliminating:
      1) Articles containing nothing new or timely.
      2) Material of poor literary or scientific quality.
      3) Papers lacking a sense of professional responsibility.
      4) Literature not free from the appearance of commercialism.
      5) Contributions of pseudo-research.
   b) Disallow the reprinting, by trade-house periodicals, of articles appearing originally in independent dental journals.
   c) Create a high standard for the acceptance and publication of advertisements [today, as represented in the ADA standards for advertising].
   d) Standardize terminology in the titles of independent periodicals:
      1) The term “Journal” is recommended as part of the title for periodicals that publish original scientific articles, and complete proceedings of dental society meetings, and which simulate in appearance the generally accepted form and size of such publications.
      2) The term “Bulletin” is recommended as part of the title for smaller periodicals primarily intended to convey to the members receiving it current society news, notes and information regarding coming programs and events, etc.

3. We recommend that, after a sufficient development of the foregoing program, trade-house dental publications be eliminated by:
   a) A campaign to pledge dental societies to refrain from publishing their scientific proceedings in such periodicals.
   b) Resolutions by the important dental societies vigorously indicting supply-house journalism, to bring the highest professional opinion to bear upon this situation.
   c) A campaign to pledge essayists
      1) Not to allow their papers to be published in trade-house periodicals.
      2) Not to read papers before dental societies that publish proceedings in trade-house periodicals.
   d) Education of the profession generally to the importance of giving support to the cause of independent journalism by:
      1) Refraining from subscribing for trade-house periodicals.
      2) Supporting all worthy measures for the advancement of the cause of independent professional journalism.
   e) Withholding official positions of trust and responsibility from those dentists who, through either commercial tendencies or lack of professional pride and sensitiveness, refuse to support measures intended to correct the present intolerable condition.
   f) Securing an agreement among the university dental school to:
      1) Refrain from advertising in trade-house periodicals.
      2) Arrange for the lecturers on ethics to instill into the minds of the student body the importance of independent dental journalism, and to the degrading influences of trade-journalism in any profession.
f) Exclusion of trade-house periodicals from exhibit space at dental conventions.

4. We recommend that the dental profession declare a doctrine of independence that will contain:
   a) An expression of cordiality toward the dental trade-houses in their proper co-operative sphere, and an appreciation of their scientific and artistic development of dental materials, appliances, instruments, equipment, and suppose.
   b) A declaration of the capability of dentistry to conduct all of its professional affairs without trade-house guidance or interference. We further recommend that the import of the recommendation in this (fourth) section be disseminated throughout the organizations of the profession.

5. It is recommended that prominent members of the dental profession refrain from accepting appointments to the editorial boards of the commercial dental periodicals. These publications would be ignored if it were not for a degree of respectability brought to them by the prominence of their editorial staffs, and the ill-advised contributions printed in them by members of the profession. These “throw aways” (a term frequently used in referring to advertising pamphlets or single sheets that are given free and wide distribution) [note in the Commission report] are distributed without subscription charge, and have little reason for existence excepting the financial advantage they bring to their owners and the publicity they give to their editors.

6. It is recommended that reprints of important writing expounding the cause of independent dental journalism be secured wherever practicable, and that they be effectively distributed in the name of the American College of Dentists.

7. It is further recommended that the present abstract and also the complete report of the Commission on Journalism be promptly published, and that sufficient reprints be obtained to permit of wide distribution.

8. Finally it is recommended that in the name of the College, the Commission on Journalism be authorized to take such practical steps as may result in the accomplishment of the purposes set forth in these recommendations.

Respectfully submitted,
Ervin A. Johnson,
John Oppie McCall,
Benjamin S. Partridge,
Edward E. Spalding,
Bissell B. Palmer, Chairman

* To avoid any misunderstanding the Commission is including its interpretation of the following terms used in this report.

By “independent dental journalism” we mean the dental journalism that is free from proprietary or trade house control and which is conducted by or for dental organizations. In its classification of dental periodicals the Commission is proceeding under the following headings:
- “Dental society periodicals” are those controlled by dental societies.
- “Commercial periodicals” are those owned by corporations organized for the specific purpose of publishing such periodicals as commercial enterprises.
- “Dental supply-house periodicals” are those owned by corporations whose primary function is to sell dental products to either the profession or the public.
- “Publishing house periodicals” are those owned by corporations in the general publishing business that issue dental periodicals as only one of their publishing activities.
- “Dental college periodicals” are those controlled by dental colleges, student bodies and alumni associations.
- “Dental fraternity periodicals” are those published by the dental fraternities.
- “Miscellaneous periodicals” will be used as the heading to conveniently group those publications not primarily of the previous six types.
The College established its own journal in 1934. For about thirty years its format was adapted to three functions: 1) publication of scientific articles, 2) archiving of the details of convocations and the active committees of the college, and 3) a forum for Fellows to exchange opinions on the issues of the day. It may have been the first chat room in dentistry.

Following the first editorial to appear in JACD is a sampling of some contents, all bearing on the role of a dental honorary in influencing the practice of the profession.

Editorial

The usefulness of a society depends largely upon its cohesiveness and solidarity. Constructive criticism and concerted action among the members of an organization are difficulty, if not impossible, unless the members either participate actively in the meetings, or are promptly kept well informed regarding current transactions. It is practically impossible for a majority of the members of a large and growing national society, such as the American College of Dentists, to attend its meetings. The College has lacked effective means, during the intervals between convocations, to keep the Fellows in close and animated touch with its affairs. The Committee on Education, Research and Relations, noting these conditions, recommended that a journal be published for this purpose. The recommendation was unanimously approved by the convocation at Chicago, in August 1933. The Journal of the American College of Dentists embodies this recommendation and this purpose.

This Journal, beginning its career as a quarterly and aiming to promote the welfare of the College, will keep the Fellows intimately aware of the fact that they are active units in a virile and progressive organization, which was created for the general improvement and extension of all phases of oral health-service, and for the continual advancement of dentistry as one of the most useful professions. Nothing that may further these objectives will be foreign to the pages of the Journal of the American College of Dentists, which will grow with its responsibilities and its opportunities. We hope this Journal will also become a useful influence for the enhancement of lay understanding and appreciation of dentistry's important share in the conservation of the public health.

This Journal supplements the existing resources in dental journalism. It represents a conviction that periodicals issued in the name of and purporting to represent dentistry—and as such seeking the patronage of dentists—should be published by accredited representatives of the dental profession, and conducted in behalf of the public and dentistry under conditions of undoubted financial disinterestedness.

Editorial of the Journal of the American College of Dentists, Vol. 1. No. 1

American College of Dentists Honor Societies

Copy of a Circular Statement to the Members

For centuries, in all parts of the world, societies have been organized to honor men and women for meritorious achievement or exceptional service. In accord with this custom, there are “honor societies” in various branches of education and in the health-service professions. In the United States, Phi Beta Kappa, for more than a century, has been the general honor society for undergraduates in academic colleges. Omicron Kappa Upsilon is the general
honor society for undergraduate dental students. The American College of Dentists—the first general honor-society among dental practitioners in the United States—was established, in 1920, not only to honor dentists of outstanding merit, but also to stimulate the development of dentistry and to further the advancement of the dental profession. The honor of membership in the American College of Dentists arises mainly from the achievements of the College, and also from the opportunity to participate intimately in the increasing service by the College for dentistry and the public. Omicron Kappa Upsilon and the American College of Dentists now meet all professional and public desirabilities for general honor-societies in dentistry in the United States.

In all nations, and in all divisions of interest, the society that first announced its purpose to confer honors in a definite relationship, and was thus accredited, has been accorded complete freedom of action in its field. The creation of a second general honor-society among practitioners of dentistry in the United States—nearly a decade after the establishment of the first—ignored the custom of respecting the priority of the existing organization; imposed upon the members of the second society the obligation publicly to justify its purpose and exposed the dental profession to the judgment that a portion of its membership lacks regard for the amenities of professional association.

International honors are conferred almost entirely by national organizations. In this way Americans have honored men in other countries, and have been honored by societies abroad. To give a second dental general honor-society in the United States a name implying that this organization is primarily “international” in import, and the American membership only a section thereof, would disregard important realities, among which is the fact that the American College of Dentists, although established as the original one in this field by outstanding dental leaders in the nation in which dentistry is most advanced, has never become the United States section of any “international” body.

The American College of Dentists, endeavoring to promote dental progress (to indicate only two its major purposes), aims to bring under professional control all journals purporting to represent dentistry and also to eliminate irresponsibility from graduate dental education. An “international” dental society that included in its membership those in American dentistry who are the chief exponents of commercialism in these two important professional fields—and which society has been conspicuously lacking in public manifestations of new professional aims and objectives—would not deserve the cooperation of dentists who have taken the pledge of membership in the American College of Dentists.

The annual report of the Commission on Journalism to the American College of Dentists, at the annual convocation of the College in Atlantic City, N. J., on July 11, 1937, unanimously stated in part:

Your Commission believes that the (American) College of Dentists should by formal action indicate that every Fellow of the College has the privilege of honorable withdrawal previous to accepting membership in any other purported, honorary, dental organization carrying in its membership the most conspicuous propriety journalists. Your Commission is in full accord with the spirit of liberalism that should always dominate the ideals, aims, and objectives of the College. While the College should never attempt to coerce thought and opinion, it does have the right to expect that in spirit and in all associations every member will actively cooperate for the attainment of the ideals, purposes, and objectives to which the College is dedicated.

This recommendation, in accord with the well-known conditions indicated above, led the College, at the same convocation and after general discussion, unanimously to adopt the following resolution:

Resolved, That the American College of Dentists will not admit to membership any person holding fellowship in any similar honorary dental organization. Fellows of the American College of Dentists who are also members of a similar organization are requested to consider the propriety of early withdrawal from one or the other.

A copy of the foregoing resolution, in a circular letter signed by President Rudolph and Secretary Brandhorst, was sent (in 1937) to each member of the American College of Dentists. The resolution was also published (in 1937) in the Journal of the American College of Dentists.

Members of the American College of Dentists who now hold dual membership such as the resolution mentions, and who have not yet made the choice indicated therein, are hereby requested to state, in statements addressed to the Secretary of the College before July 16, 1939, why—if they continue such dual membership—they should be entrusted with an of the responsibilities of Fellowship in the American College of Dentists.

Statement adopted at a meeting of the Board of Regents of the American College of Dentists, in Chicago, Ill., on February 12, 1939 and appearing in the Journal that year.
Committee on the William J. Gies Endowment Fund for the Journal of Dental Research

This committee is proceeding at a rapid pace with its work. Starting with an original committee of eleven, the committee has grown, including the secretary of each state society, with a committee of three appointed within each state, augmented by one member of the College within each state, and in addition, we have asked the trustees of the American Dental Association each to lend a helping hand with his district. This gives us a large committee, out to raise, in round figures, $217,000 to complete the Endowment Fund for the Journal of Dental Research.

One member alone has turned in over $500 in cash and pledges. If each one of the committee will work as diligently we will see the fund completed. We hope every member of the profession will be interested to the extent of a nominal contribution.

Correspondence and Comment

Additional Opinions on the Recent Commercial Exploitation of the Journal of Dental Research

The issue of the Journal of the American College of Dentists for September, 1942, presented, on pages 347 and 348, resolutions adopted by the American Association of Dental Editors and the Regents of the American College of Dentists last August condemning the commercial exploitation to which the JDR has recently been subjected.

The judgment of the Pittsburgh Section of the A.C.D. was formally expressed in the following resolutions, which were adopted unanimously at the meeting of the Section on May 2, 1942:

[Several “whereas” clauses follow, detailing how the Journal of Dental Research has entered into an agreement with a manufacturer to publish advertisements side-by-side with research articles studying their product. JDR immediately stopped this practice, but others have taken it up.]

Resolved: That the Pittsburgh Section of the American College of Dentists express to the officers and members of the International Association for Dental Research [to whom the rights of JDR had recently been transferred] its profound disapproval of the action of the Publication Committee in consummating such an unprecedented agreement, and suggest that the Association take immediate action to see that those ideals of dental journalism traditionally exemplified by the Journal of Dental Research be protected from any further subversive action by any officer, committee, or agent of the Association.

Minutes of the Meeting of the Board of Regents

American College of Dentists
February 11 and 12, 1945, Chicago, Ill.


Before the result of the ballots was announced, the Secretary asked for a discussion of the question of required majority for rescinding the resolution. Three possibilities were pointed out:

1) That the resolution could be rescinded by a majority vote of all the members.
2) That it could be rescinded by a majority of the votes cast, assuming that prior notice had been given.
3) That, no prior notice having been given, it required a two-thirds majority for passage.

Those present interpreted the mail ballot and at least 30 days in which to cast the votes, as complying with the meaning of the parliamentary rules on previous notice.

It was, therefore, agreed that a majority of the votes cast would constitute a decision. The report of the tellers was then read as follows:

St. Louis, Missouri, January 18, 1945
to the American College of Dentists:

We have made the following examination and count of the returned Official Ballots mailed out to the members of the American College of Dentists requesting a “Yes” or “No” vote covering the following resolutions:

The resolution adopted at Atlantic City, on July 11, 1937, reads as follows:

“Resolved, that the American College of Dentists will not admit to membership any person holding membership in any similar honorary dental organization. Fellows of the American College of Dentists, who are also members of a similar honorary dental organization are requested to consider the propriety of early withdrawal from one or the other.”

Do you favor rescinding this resolution? Vote “Yes” or “No”.

The 697 unopened returned envelopes on hand containing the above named Official Ballot as mailed out to all members entitled to vote were presented to us at the Office of the Secretary, St. Louis, Missouri, as of January 15, 1945, and the signatures of the members.
appearing on and in the envelopes were checked with the official membership list to ascertain that the name appearing on each slip attached to or appearing in the envelope was listed as a member. The ballots were then removed from the envelopes and classified as to “yes” or “no” votes and the count found to be as follows:

In favor of rescinding the resolution adopted at Atlantic City on July 11, 1937: 386 “Yes” votes.

Not in favor of rescinding the resolution adopted at Atlantic City on July 11, 1937: 307 “No” votes.

Defective ballots not classified or counted: 4 votes.

Total returned ballots: 697.

We hereby certify that the above is a true and correct classification and count as made by us of the above stated 697 returned official ballots,

(Signed) James C. Thompson & Co.
Certified Public Accountants

*Journal of the American College of Dentists*

**Minutes of the Meeting of the Board of Regents**

**American College of Dentists**

**November 10, 11, 12, and 14, 1966**

**Baker Hotel, Dallas, Texas**

. . .

Reports of Officers: President Anderson presented the following report:

. . .

Number 3—Future Joint Action or Merger

The thought presented here is briefly, that some time in one, two, three, or four decades from now, an amalgamation or merger of the two organizations (A.C.D. and I.C.D.) might be effected.

A counting of names of the I. roster reveals that 30% of the membership were members of the [American] College. There appears to be a subtle competition for members going on in which more and more are becoming member of each group [both groups]. There appears to be a tendency, too, for one group to “sign up” nearly all promising younger men, leaving the A. group somewhat in the position of being second chooser. Perhaps this is all right and perhaps, too, it is all right to have the two organizations, but one cannot help but ask the question, “Is it necessary?” And, “What is the justification for the two organizations?” A pledge is required of every man in each group. If the pledge means anything, they are really not too dissimilar.

One must keep in mind the long term approach to this projection—even a century from now if necessary—and should not be too much affected by present prejudices or shortcomings on the part of any group.

The American College of Dentists has been pretty proud of it statue and achievements for quite some time. Any effort which could enhance the activities or improve a relationship or strengthen the professional statue of any group which could make dentistry a finer profession for the public good, I am sure could only be considered a fine contribution to society and most certainly would be a fulfillment of a worthy objective.

It is recommended then that the College give some study to Future Joint Action or Merger of Groups. This refers particularly to those who would seek to emulate the America College of Dentists’ activities. Such study would necessarily have to be an examination of whether such could ever be achieved and if so, on what grounds. Furthermore, this is not to be considered an immediate, but rather one, two or three decade proposal for action.

*“This Journal, beginning its career as a quarterly and aiming to promote the welfare of the College, will keep the Fellows intimately aware of the fact that they are active units in a virile and progressive organization, which was created for the general improvement and extension of all phases of oral health-service, and for the continual advancement of dentistry as one of the most useful professions.”*
No one who has been inducted as a Fellow of the College at Convocation will forget the pageantry and dignity of the occasion. A special part of that ceremony is the symbolism of the mace and torch. These were dedicated in 1939.

**Dedication of Mace**

Fellows, you will be privileged to view for the first time, the mace of the American College of Dentists. In a general way, all of you are familiar with a mace and its purposes. However, some necessary researches in connection with the development of your mace brought to light interesting information. The officers of the College felt this information might be of interest to you, and so have delegated some the pleasant duty of briefly presenting this, as well as presenting to you the symbology of the College Mace.

The Mace, in present usage is a club-shaped staff of office, usually borne before officials or displayed on the table of a legislative or municipal body, as a symbol of authority.

Originally the mace was a weapon of offense and defense, and was made of iron or steel, about 12-18 inches in length with sharp steel flanges at the top, capable of breaking through the strongest armor worn in those days. The mace was carried in battle by medieval bishops instead of a sword, so as to conform to the canonical rule which forbade priests to shed blood.

Although in later years the lance, sword, bow and arrow were the principal weapons of war, the mace was still used when fighting at close quarters.

For nearly 300 years the mace continued to be used as a weapon of offense and defense, but toward the end of the 15th century, it began to assume an ornamental character.

At first the bottom was merely embellished with the royal arms of the reigning monarch. But in the course of time, the mace was reversed, bringing the ornamental end to the top.

The earliest ceremonial maces were also intended to protect the king’s person, and were borne by the sergeants-at-arms, a royal body guard established in France by Philip II and in England probably by Richard I. By the 14th Century maces were encased with precious metals and set with precious stones, and became purely ceremonial maces.

Thus, the mace has been transformed from a symbol around which all who hold kindred ideals may rally. The mace, like the nation’s flag, should be revered because of what it symbolizes.

While the mace has had its origin in the old world, many colleges and legislative bodies on this side of the Atlantic have adopted its use. Hence, in no sense is the American College of Dentists pioneering or bowing to a European custom by incorporating the mace in its ceremonies.

Now a few words about the symbology of our mace. The seal of the College forming the upper hemisphere of the mace is emblematic of the principles and objectives of the College. The figures immediately below the hemisphere represent the College officers and regents, and show them actively supporting the College Seal, which is emblematic of their duty to keep aloft the College principles and objectives.

The figures stand squarely on and are firmly supported by the lower hemisphere of the head of the mace,
representing the College membership and is emblematic of and emphasizes the necessity for the whole-hearted support by all fellows of the College, for if the fellows do not support the action taken by the officers and regents, they are powerless. The College is suitably indicated by rose and lavender crystals, the College colors. The stem or shaft of the mace is divided into three parts, the upper end represents the dental profession as a whole, and indicates the intimate relationship it has with the College and the College has with it, namely that of service to the profession at large. The middle ornament is symbolic of the service the College renders to the public.

The extreme lower end of the shaft symbolizes the service the College renders to the individual dentist.

The question as to the use of the mace very often arises. No better authority has been found by your committee than the Rules published by the National Association of Macebearers, England, from which I quote: “It is hardly necessary to go too deeply into the mace being an emblem of authority. Many charters definitely state that the mace will be carried before the mayor on all occasions of importance and it has always been the practice never to separate the mayor from his emblem of authority.

“The mayor should always be preceded by the mace when he enters the council chamber for the council meeting. The members, who should be already in their places, will immediately rise on hearing the mace-bearer announce “His Worship the Mayor”, the mace will be placed on its stand; after the mayor takes his seat the mace-bearer will retire and the members resume their seats.”

Modifying the forgoing so as to blend into our western customs, it is suggested that the mace precede the president on all formal occasions of the American College of Dentists. As the mace enters the hall, the assemblage should arise as a mark of respect to the highest office within their gift. This must be taken as an honor due to the office and not as an honor to the individual who happens to be president. When the mace is placed on its stand the president takes his seat, after which those in the audience will be seated.

Mr. President, pursuant to the assignment given them a year ago, the ceremonial committee presents to you, the emblem of your authority, as President, the Mace of the American College of Dentists.

(Do Midgley walks on stage carrying the Mace and presents it to the President.)

PRESIDENT: On behalf of all fellows, present and future, I accept this Mace and dedicate it for all time to come, to unselfish and inspirational leadership. May it ever be found in the vanguard of every righteous cause, may it lead us ever onward to more noble objectives, and should the occasion demand, may it be used like its prototype, as an instrument of destruction against all
influences subversive to the forward march of true professionalism.

(President takes Mace and places it on altar.)

**Ceremony Dedicating Torch and Honoring Founders**

Detail of Business and Positions.

Founders will be divided into 4 groups. One group will be at rear of hall, one group the middle of either side and a group of 2 will be in front. Each founder will have a candle that he will light unobtrusively before the house lights are extinguished.

As the words, “they come now as they did then” (4th paragraph) are spoken each group moves with measured steps to the center of the hall, and they continue the movement as a group up the center isle, in front of the altar, where Dr. Midgley will be standing holding the unlighted torch. They form a circle around the torch and each simultaneously touches their lighted candle to the torch. The moment the torch has been lit they extinguish their candle light. At conclusion of ceremony they take their seats in the audience, and house lights come up.

PRESIDENT: We will now have the ceremony dedicating the torch, etc. (Kill house lights.) After a moment silence in darkness, organ plays softly. A moment later Marshal speaks as follows:

MARSHAL: In the beginning, dentistry was without form and void, and darkness was on the face of the profession.

Gradually, in the North, in the South, in the East and in the West, a few tiny isolated lights began to send forth their tremulous and intermittent gleams. Gleams frequently extinguished by charlatanic winds, the winds of undue pretension, of empiricism, of commercialism, of bigotry and the winds of selfishness and greed. But the keepers of these lights were undaunted by these obstacles. For they had generous supplies of the oil of courage, of the oil of conviction and the oil of noble purposes and objectives. As many times as were their lights extinguished, they re-lit them with the tender of their invincibility.

In time and almost simultaneously it became apparent to a group of keepers of these lights that massing them into one common light would produce a beam of increased intensity—a beam more resistant to the onslaught of ill winds—a beam of such concentration that it would burn to ashes any professional dross upon which it might be directed. And so these lights were massed and the ACD was created.

In commemoration of the original convergence of these lights, they come now, as they did then, from the North, from the South, from the East, and from the West. Converging this time to light the symbol of the great torch they lit on Aug. 22, 1920. They come now to light for the first time the symbolic torch of the American College of Dentists.

All honor to you founders. You who have labored unselfishly that our burdens and humanities [sic] generally might be less oppressive, you who have labored, not for personal glory, but for the principles that are fundamental to the advancement of our profession, you who have been unwavering in your condemnation of corrupt and equivocal practices. All honor to you who first lit the torch and kept it burning so brightly.

In token of the esteem in which you, the founders, are held by the college, the officers have caused your names to inscribed on this torch, so that the generations to come may know and rejoice that you trod this earth before them. May these beneficent rays illuminate for all time the true and proper paths for professional feet to travel.

MARSHAL: Mr. President, the ceremonial committee presents to you the Torch of the American College of Dentists.

PRESIDENT: On behalf of the American College of Dentists, I accept this torch and consecrate it to the high objectives to which the College is committed.

Business for President: President takes torch from Dr. Midgley and places it in the stand.
William Gies arguably had a greater impact on American dentistry than any other individual. He helped organize one of the first dental hygiene schools and founded the International Association for Dental Research and the Journal of Dental Research. He directed and authored the Carnegie Foundation for the Advancement of Teaching Bulletin Number 19 (now referred to as The Gies Report) that created dentistry as a profession distinct from medicine and respected by the public. He served from 1934 through 1942 as Assistant Secretary of the College and is to this day the only person not a dentist to be inducted as a regular member of the College.

Appearing below is part of the testimony in honor of Dr. Gies in 1937 at a dinner at Atlantic City, New Jersey.

A Tribute to William J. Gies

William John Gies—A Tribute

Henry L. Banzhaf, BS, DDS, LL.D., FACD
Marquette University, Milwaukee, Wis.

While it is not easy, in a brief statement, to describe fittingly a character rich in humanity and a career abounding in achievement, nevertheless in this instance it is a great pleasure to have the opportunity of saying a few words about my old friend, Dr. William John Gies. As I see him, Dr. Gies has proved himself a man of lofty professional vision, and has always recognized the truth that in order to serve effectively science must not be subordinated to commercial interests. He knew that to be well ordered a profession must set above all else the importance of considering principles as apart from persons or profit; that unless selflessness rather than selfishness prevailed, it would lose dignity in its own eyes and high esteem in the eyes of the public.

Such vision, I am proud to say, is not particularly rare, and many professional men possess it; but comparatively few, I fear, have demonstrated that they have the courage and energy to wage a great war in support of a sound principle, and thereby to bring the real into line with the ideal and translate dreams into facts. With Dr. Gies, to see the vision is to launch the enterprise and to pursue it with avidity to its logical conclusion. His campaign against proprietary dental journalism is a case in point. Many who have been associated with our professional can vividly remember the days when the greater part of dental research and in fact all forward-looking movements waited for their promulgation upon the commercial house-organs. Dr. Gies has led the fight to liberate dental professional writing from its former proprietary control. How successful his efforts have been can be seen from the fact that, of the 121 dental publications in the United States, 104 are now divested of all commercial influence.

Yet in spite of his lofty professional idealism he is generally known as a genial and a most companionable person. It cannot be said of him as it was of Washington: “He had many acquaintances but no intimates.” The secret of Dr. Gies’ ability to make friends and to hold them is not hard to discover. For one thing, he likes people and he does not hesitate to show his liking. For another, he thinks and speaks kindly of people and does not judge men or their motives hastily. He is never too busy to practice the minor social graces, and under any and all circumstances his abilities and his achievements have always compelled the admiration of his friends and associates. I have known Dr. Gies for many years, have worked with him, traveled with him, and lived with him, but have never heard him say an unkind word of anyone and this fact alone, I feel, reveals his broad social viewpoint.
Not that he has been weak. But his quarrel has been with issues rather than with men. As an illustration of his innate courtesy, let me point to the Carnegie Foundation’s Bulletin Number 19, where he makes a constructive criticism of every dental school in the country. There is much truth here—some of it not altogether pleasant reading, to be sure; but there is no sting, and as a result no scars are left behind. The praise is eagerly given, the blame is reluctantly expressed, and the viewpoint is one of impartial justice. In my experience with Dr. Gies I have always found him as ready to excuse as he is ready to attack.

In an exceptional character such as his we can take many things for granted—that he has been a loving husband, a kind father, a good neighbor, a loyal friend. One of his noteworthy accomplishments is the fact that he is a master of the English language, spoken as well as written. His reports are more than a commonplace recording of dull facts, they are masterpieces of logical thinking set forth in a style which fascinates and easily holds the thoughtful interest of the reader.

In all things pertaining to the progress of dentistry Dr. Gies has never smugly sat back in the false assurance of perfection or of merely trying to appear learned, but largely due to his work and writings there is a dawning vision that dentistry is in reality on an educational parity with medicine as one of the important divisions of health service, and the prospect that it may soon be universally so regarded is becoming brighter day by day.

I believe it is a conservative statement for me to say that it is often a source of wonder to those not particularly gifted with the abilities and skills possessed by Dr. Gies how such a person can maintain an interest, such as he has shown for dentistry, unabated for so many years. In explanation it may be said that it is undoubtedly true that in each generation a few persons are born who possess a will and a spirit which may be likened to a restless flame, an inner urge for service and progress with the desire to act, to lead, to carry forward no matter what the obstacle. All of the famous scientists, explorers, authors, missionaries, and other individuals who have won places of authentic leadership in some worth while movement for the betterment of mankind, have possessed such a God-given restless flame by means of which they accomplished what to others may have seemed to be impossible. Dr. Gies is undoubtedly one of these chosen few into who Providence has breathed this spirit of high adventure and unquenchable desire to serve mankind.

His original gifts were great but his courage, his vision, his industry, have magnified these a hundredfold. He will long be remembered both for what he is and what he has done.

1 The portrait of William John Gies facing this page (taken in 1929) has been reproduced from page 2 of the published program of the dinner testimonial at Atlantic City on July 11, 1937. See the succeeding articles, pages 164 and 169.

2 This tribute, and the succeeding biographical sketch and account of the proceedings of the dinner testimonial, have been coordinated in this issue by a committee of the American College of Dentists consisting of the President and Secretary, Drs. A. L. Midgley and O. W. Brandhorst, and the Toastmaster, Dr. H. E. Friesell.

3 Dr. Banzhaf was Chairman of the Honorary Committee for the dinner testimonial mentioned in the preceding footnote. See page 236.
In the 1940s, 1950s, and 1960s the College became a significant national player in identifying, debating, and articulating positions on issues important to the profession. At any time there were four to six active committees engaged in fact finding and issuing of reports. Among the issues where the College showed leadership were relationships with technicians (especially independent ones), the Longshoremen’s closed panel program in San Francisco (the beginnings of dental insurance), manpower and the use of auxiliaries to extend care provided and profits for practitioners, continuing education, prevention, recruitment, and a “Big Brother” program.

For several years in the 1960s, the College sponsored a summer research institute in Washington. This was a clear return to one of the founding motives of the College forty years previous. A report on this project appears below.

**Institute for Advanced Education in Dental Research**

Comments by Dr. Thomas J. Hill  
Directing Secretary of the Institute

**Purpose**

The purpose of the Institute for Advanced Education in Dental Research is to provide the opportunity for bringing promising investigators in Dentistry into intimate contact with senior Scientists in basic and fundamental research and who are making significant contributions in their fields. By making this contact sufficiently long and informal, a broadened and deeper understanding could develop concerning dentistry’s problems and fruitful ways to attack them.

The attainment of intimate contact between young investigators and senior scientists is usually limited by the daily life of the university or dental school, and is not obtained by the brief and formal contacts possible within the framework of scientific meetings and specialized symposia. The Institute provides an unique way of familiarizing young investigators not only with some of the more promising new techniques for research in dentistry but, more importantly, with the methods of thought and work of experienced men who have contributed to the creation of these techniques and to their application. It is expected that the junior investigators will, after a period of association, apply new concepts and methodologies to their own research and thereby enhance and broaden the direction of their individual endeavors.

The Institute is sponsored by the American College of Dentists and is aided by a grant from the National Institute of Dental Research. The American College of Dentists has formed a Committee to direct the Institute. It is composed of Drs. Armstrong, English, Hill, Pruzansky, and Scott. The Committee reports to the Committee on Research of the American College of Dentists. Dr. Hill served as Secretary for the Committee.

**Plan of the Institute**

It is the plan of the Institute to devote its attention to the two broad fields of Growth and Development and to Physical Biology. Each year the subject content will change by covering different phases of these fields. To implement this, different institutions or laboratories will be used because of their known strength and interest in the areas selected. For this changing emphasis some change and/or additions in the Mentors will provide men of particular competence.

Those attending the Institute are selected not only on their record of accomplishments and promise for the future, but also on their ability to add to the dialog that comprises the curriculum. Further the attendants are selected to provide the greatest variety of disciplinary representation pertinent to the subjects. Five or six men are selected for
each field and from applications made to the American College of Dentists. Special effort is made to select investigators whose work is closely related in emphasis to the area under consideration. The Institute will pay the attendants for their travel expenses and a stipend based upon the cost of their living. This is a per-diem of $16.00.

The Institute will hold sessions each year of not less than three nor more than four weeks. The time may be divided into two sessions of two weeks each. During this time the two groups will meet together for half of the allotted time in an effort to broaden the concept and to familiarize the attendants with the methodologies and techniques of the other field and their related or overlapping application. The remainder of the sessions, the two groups meet separately to devote their time to techniques of special interest of their own group. The attendants are encouraged to discuss their own research and any problems that may be involved so that they may have the benefit of the suggestions of other attendants and the mature experience and judgment of the Mentors. The informality of these sessions and the prolonged length of contact between attendants and Mentors contributes much to the free and easy exchange of information.

**Past Meetings of the Institute**

**The 1963 Session**

In 1963 the Growth and Development Section considered skeletal and facial growth with the genetic influences. The Jackson Memorial Laboratory at Bar Harbor was used for one week in the genetics study. The Mentors were Drs. Samuel Pruzansky and Krogman. They had the assistance of Dr. Bosma and Drs. Stover, Savin, Werboff and Russell of the Jackson Laboratory.

The Physiology Biology Section gave attention to the fields of the electron microscope and ultrastructure research and isotopes and radio-tracer application. For these purposes the laboratories of the University of Arizona and the University of Minnesota were used. Dr. Ralph W. G. Wyckoff was the Mentor in electronmicroscopy. He had the assistance of Dr. David Scott. Dr. Wallace Armstrong was the Mentor in radioactive tracers. He had the assistance of Dr. Leon Singer.

**The 1964 Session**

In 1964 the Growth and Development Section gave attention to genetics and embryology. The laboratories used were the Jackson Memorial Laboratory at Bar Harbor and the Department of Embryology of the Institution of Washington at Baltimore. The Mentors were Drs. Samuel Pruzansky and Edward Hunt with the assistance of Dr. Charles Jerge. Assistance in seminars was given by the staffs of each institution.

Physical Biology again was concerned with electronmicroscopy and the use of isotopes. The laboratories used were the Universities of Minnesota and Arizona. The Mentors again were Drs. Wallace Armstrong and Ralph W.G. Wyckoff. They had the assistance of Drs. Leon Howard Myers, Leon Singer and David Scott. For two weeks of the time the two sections met together to discuss problems common to each.

**The 1965 Session**

The section on Growth and Development will deal with embryogenesis, postnatal development, experimental biology, teratology and genetics. The Mentors will be Drs. Samuel Pruzansky and Edward Hunt. They will have the collaboration of the staff of the Rockefeller Institute and others. The duration of these sessions will be three weeks—May 3rd to May 14th and October 18th to 22nd.

The Physical Biology section will give consideration to concepts and experimental methods in modern biochemistry with special reference to protein-polysaccharides. The Mentors will be Drs. D.W. Wooley and D. Dziewiatkowski of the Rockefeller Institute. The length of the session will be three weeks—May 3rd to May 14th and October 18th to 22nd.

Investigators interested in attending the 1965 Session should contact:

Dr. Otto W. Brandhorst, Secretary
American College of Dentists
4236 Lindell Blvd.
St. Louis, Mo. 63108

Those interested should write to Dr. Brandhorst and include their curriculum vitae and their special field of research with a list of their publications.

Efforts will be made to select men whose fields of interest are closely allied with the year’s study. Registrations will close on February 15th. ■
III: Attitudes Associated With the Dental School

In this chapter there are four sections: the first will relate the student attitudes toward various aspects of the dental curriculum; the second, relations to other students, problems and experiences; the third will deal with instructors and instruction; and, finally, a summary of these matters as they affect the professional attitude of the student because of his experiences in dental school.

THE SCHOOL AND THE CURRICULUM

The average dental student seems to regard the dental school as having placed on him very severe requirements. Some students feel that these have been so severe a drain on them that they have actually impaired health. Students complain bitterly and almost universally about the prevalence of the point system or similar requirements on clinical cases in order to graduate, about the severity of having to pass certain basic science courses with passing grades, and they feel that there is an enormous amount of competitiveness in the dental school itself between members of the student body. This competitiveness apparently centers around course grades, and, consequently, class standing. Those students in the middle and at the bottom of the class definitely indicate their feeling that the high ranking students in the senior class are able to command more of the instructors and that those classmates in turn are favored by the faculty in matters of instruction. One of the items in the questionnaire inquired about how much competitiveness there was in the school. [Figure 1 shows] the item itself and the actual percentages given.

This competitiveness in the dental schools leads the students to feel that they are in some kind of an endurance contest or race with their classmates. While we may sympathize with these students to a certain extent, competitiveness is prevalent in the professional school or in graduate school in our universities; everywhere students are just as apt to complain of this kind of competitiveness. While competitiveness may have some deplorable side effects, such as a tendency toward cheating as we will note below in our section on relationship to classmates, competitiveness also has the positive factor of stimulating students to the necessary level of effort in studies in order to qualify within a profession.
Quite early in the questionnaire, we asked students to give their opinion about various courses they had in dental school. [Figure 2 lists] the four pairs of questions offered.

It can easily be imagined that there was a wide variety of response to those kinds of questions. Frankly, this was a difficult area for us to code, and it would be both useless and trivial for us to attempt to report all the kinds of responses to each of these questions. In order to achieve some order to this material

| I. A. | The most difficult subject area to master |
| I. B. | The easiest subject for you to master |
| II. C. | The most interesting, stimulating area is |
| II. D. | The dullest, most boring is |
| III. E. | The one that in your opinion will have the least practical application is |
| III. F. | The most useful, in your opinion, for later practice is |
| IV. G. | The subject you wish had been given more emphasis is |
| IV. H. | You would eliminate, if you had your choice, from the curriculum |

Figure 2. **Looking over your entire four years of dental studies, try to name:**

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<thead>
<tr>
<th>Group I–Anatomy</th>
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<td>Anatomy</td>
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<td>Growth and Development</td>
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<td>Neuro-Anatomy</td>
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<td>Micro-Anatomy</td>
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<td>Morphology</td>
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<th>Group III–Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Materials</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Group IV–Medicine</th>
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</thead>
<tbody>
<tr>
<td>Principles of Medicine</td>
</tr>
<tr>
<td>Dental Hygiene</td>
</tr>
<tr>
<td>Internal Medicine</td>
</tr>
<tr>
<td>Odontology</td>
</tr>
<tr>
<td>Oral Diagnosis</td>
</tr>
<tr>
<td>Periodontics</td>
</tr>
<tr>
<td>Physical Diagnosis</td>
</tr>
<tr>
<td>Treatment Planning</td>
</tr>
<tr>
<td>Endodontics</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Group V–Principles of Dentistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etymology (vocabulary of dentistry)</td>
</tr>
<tr>
<td>Ethics</td>
</tr>
<tr>
<td>First Aid, Civil Defense</td>
</tr>
<tr>
<td>Dental Orientation</td>
</tr>
<tr>
<td>History</td>
</tr>
<tr>
<td>Practice Management</td>
</tr>
<tr>
<td>Jurisprudence</td>
</tr>
<tr>
<td>Dental Economics</td>
</tr>
<tr>
<td>Dental Literature</td>
</tr>
<tr>
<td>Oral and Written Communications</td>
</tr>
<tr>
<td>Scientific Writing</td>
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<table>
<thead>
<tr>
<th>Group VI–Pathology</th>
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</thead>
<tbody>
<tr>
<td>Oral Pathology</td>
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<tr>
<td>Hospital Assignments</td>
</tr>
<tr>
<td>Oncology</td>
</tr>
<tr>
<td>Clinical Pathology Conference</td>
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<table>
<thead>
<tr>
<th>Group VII–Prosthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crown and Bridge</td>
</tr>
<tr>
<td>Cleft Palate</td>
</tr>
<tr>
<td>Complete Dentures</td>
</tr>
<tr>
<td>Ceramics</td>
</tr>
<tr>
<td>Gold Foil Work</td>
</tr>
<tr>
<td>Gnathology ( stomatic)</td>
</tr>
<tr>
<td>Prosthesis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VIII–Oral Surgery</th>
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</thead>
<tbody>
<tr>
<td>Anesthesia</td>
</tr>
<tr>
<td>Hypnosis</td>
</tr>
<tr>
<td>Exodontics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group IX–Orthodontics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthodontics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group X–Pedodontics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedodontics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group XI–Operative Dentistry and Other Dental Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operative Dentistry</td>
</tr>
<tr>
<td>Other courses:</td>
</tr>
<tr>
<td>Clinical Subjects</td>
</tr>
<tr>
<td>“Technique Courses”</td>
</tr>
<tr>
<td>Fourth Year Didactics</td>
</tr>
<tr>
<td>“Theory Courses”</td>
</tr>
<tr>
<td>Laboratory Techniques</td>
</tr>
<tr>
<td>Auxiliary Personnel</td>
</tr>
<tr>
<td>Preventative Dentistry</td>
</tr>
<tr>
<td>Dental Assisting</td>
</tr>
<tr>
<td>Radiology</td>
</tr>
<tr>
<td>“Mechanical Courses”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group XII–Physical Science and Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Sciences</td>
</tr>
<tr>
<td>Statistics</td>
</tr>
<tr>
<td>Bio-Physics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group XIII–Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatry (and Psychosomatics)</td>
</tr>
<tr>
<td>Anthropology</td>
</tr>
<tr>
<td>Psychology (and Human Relations)</td>
</tr>
<tr>
<td>Public Relations</td>
</tr>
<tr>
<td>General Economics</td>
</tr>
<tr>
<td>“Socialized Dentistry”</td>
</tr>
<tr>
<td>Dental Sociology</td>
</tr>
</tbody>
</table>
we have created 13 groupings of the responses and a 14th grouping for those responses such as “all,” “none,” left the item blank, or referred to poor instruction or inadequate instructors was mentioned only in response to the item “the dullest, the most boring,” and the final item “would eliminate from the curriculum.”

The students seemed to take great pleasure in attacking this section. Obviously, it is probably one of the very few chances they have to express their forthright opinion about the dental curriculum and to expect anyone to pay any attention to it. While the students may have left other sections of the questionnaire blank, in general they completed this particular one about courses quite thoroughly. Some students gave detailed answers with more than one point mentioned for each question. It has been impossible for us to code multiple answers on any questions and we always had to pick the single first response or the most prominent response given. (Figure 3 shows) a list of the courses given in the 13 groupings for which we will give percentages of the responses to the various questions. We recognize that this will do some violence to the departmental disciplinary breakdowns of many dental schools. We can hope that the reader will translate these terms into the appropriate sections, divisions, and departments of his own dental school. We apologize at the very outset for the placement of any particular course that may be offensive to some schools that have placed it elsewhere. In making this breakdown, we scrutinized several dental school catalogs, but immediately realized that we could not satisfy everyone, however it was to be done.

It is recognized that the above groupings in many respects must be considered somewhat artificial, but we hope that we can communicate with them in recording the responses in the following sections. We shall pick up these questions that students answered about the curriculum in pairs.

Tables 3.1 through 3.4 should be viewed as a whole. The general impression from this is that those courses viewed as the most difficult, dull, boring, and least practical are the courses that students would like to eliminate from the curriculum. Those courses that are

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>Per Cent of Responses*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most Difficult</td>
</tr>
<tr>
<td>I. Anatomy</td>
<td>19.8</td>
</tr>
<tr>
<td>(anatomy)</td>
<td>(13.5)</td>
</tr>
<tr>
<td>(histology)</td>
<td>(3.2)</td>
</tr>
<tr>
<td>II. Biological Sciences</td>
<td>50.0</td>
</tr>
<tr>
<td>(bio-chemistry)</td>
<td>(20.6)</td>
</tr>
<tr>
<td>(physiology)</td>
<td>(8.5)</td>
</tr>
<tr>
<td>(pharmacology)</td>
<td>(8.0)</td>
</tr>
<tr>
<td>(bacteriology)</td>
<td>(4.5)</td>
</tr>
<tr>
<td>III. Dental Materials</td>
<td>—</td>
</tr>
<tr>
<td>IV. Medicine</td>
<td>2.6</td>
</tr>
<tr>
<td>(oral diagnosis)</td>
<td>(1.0)</td>
</tr>
<tr>
<td>(endodontics)</td>
<td>(—)</td>
</tr>
<tr>
<td>(periodontics)</td>
<td>(—)</td>
</tr>
<tr>
<td>V. Principles of Dentistry</td>
<td>—</td>
</tr>
<tr>
<td>(history)</td>
<td>(—)</td>
</tr>
<tr>
<td>(public health)</td>
<td>(—)</td>
</tr>
<tr>
<td>VI. Pathology</td>
<td>10.0</td>
</tr>
<tr>
<td>(oral pathology)</td>
<td>(10.0)</td>
</tr>
<tr>
<td>VII. Prosthetics</td>
<td>6.8</td>
</tr>
<tr>
<td>(crown and bridge)</td>
<td>(2.9)</td>
</tr>
<tr>
<td>(prosthetics)</td>
<td>(3.7)</td>
</tr>
<tr>
<td>VIII. Surgery</td>
<td>—</td>
</tr>
<tr>
<td>(oral surgery)</td>
<td>(—)</td>
</tr>
<tr>
<td>IX. Orthodontics</td>
<td>1.1</td>
</tr>
<tr>
<td>X. Pedodontics</td>
<td>—</td>
</tr>
<tr>
<td>XI. Operative, et al.</td>
<td>4.8</td>
</tr>
<tr>
<td>(operative dentistry)</td>
<td>(2.0)</td>
</tr>
<tr>
<td>XII. Physical Sciences</td>
<td>—</td>
</tr>
<tr>
<td>XIII. Social Sciences</td>
<td>—</td>
</tr>
<tr>
<td>XIV. Residual responses</td>
<td>2.9</td>
</tr>
<tr>
<td>(left blank)</td>
<td>(2.1)</td>
</tr>
</tbody>
</table>

*Throughout all these tables frequencies of less than 1 per cent are indicated by dashes, —; subjects listed in parentheses ( ) under each group are those making the most important contribution to the group total.
easy, interesting, and stimulating, and are viewed as having direct usefulness for later practice are those, in general, on which the students would like to have more emphasis.

Anatomy is viewed as being the most difficult and the easiest by virtually the same number of students in both categories. It is the Biological Sciences group, and Bio-Chemistry in particular, which is viewed as the most difficult area to master. It is interesting that the Operative Dentistry course sequence is viewed as easiest.

Table 3.2 compares the most interesting and stimulating courses with those that are conceived of as dullest and most boring. That grouping under the Principles of Dentistry clearly takes the prize for being the dullest and most boring, with Public Health being the most outstanding contributor to the over-all percentage. History also accounts for a good percentage of this negative note. It is to be expected that because the Biological Sciences are viewed as difficult that they also are viewed as dull and boring, again with Bio-Chemistry the important contributor to this percentage. Additionally, it is worth noting that Dental Materials is conceived as interesting or stimulating by as much as 1 per cent of our total sample, while 6.5 per cent of the sample conceived it as dull and boring. Areas of outstanding interest are, of course, the major specialties—Pathology, Prosthetics, Surgery, and, again, the favorite, Operative Dentistry. Orthodontics is conceived more as dull and boring than it is as interesting and stimulating. When I inquired among dentists and dental faculties concerning the reason for this, it was pointed out to me that the number of those who conceive Orthodontics to be dull and boring probably is accounted for essentially by those dental schools in which Orthodontics is not taught as a clinical method, but is restricted to lectures. Indeed it seems true, from our responses, that those contributing to the high percentage of dull and boring responses on Orthodontics were those who most often specifically mentioned Orthodontic lectures.

Passing to Table 3.3, the comparison between the least practical and most useful courses, the differences again become striking. The Biological Sciences contain very strong negative votes, but the outstanding negative feeling is directed toward a group of courses.
included under Principles of Dentistry—Ethics, History, Oral and Written Communications, and Public Health—with the interesting exception that a fair percentage consider the courses in Practice Management (in some schools called Dental Economics) as being the most useful out of this group. There are very strong positive responses toward those areas of dental education that are regarded by the students as having direct practical application to their work. In Medicine, Oral Diagnosis and Periodontics are seen as quite useful by large percentages. The balance, however, is in the positive direction on Pathology, and strongly positive for Prosthetics and Surgery. The balance, however, is in the negative direction when we come to the dental specialty of Orthodontics. It then shifts back into positive on Pedodontics. The overwhelmingly strong vote for being a useful area of study is Operative Dentistry.

The last table (3.4) compares the courses in which students preferred to have more emphasis against those they would eliminate from the curriculum. It goes in the negative direction on the basic Biological Sciences and Anatomy, but the greatest portion of the negative vote in Biological Sciences is accounted for by Bio-Chemistry alone. The exception in Biological Sciences is strongly expressed need for more emphasis in the field of Pharmacology. The student population also wish for greater emphasis on Medicine (Oral Diagnosis and Periodontics). Similarly, they would prefer some more emphasis in the fields of Pathology, Prosthetics, Oral Surgery, Orthodontics, and Operative Dentistry. On the negative side of the ledger, the outstanding vote is cast in the direction of the group of courses under the Principles of Dentistry. Very strong negative votes are given toward Public Health, History of Dentistry, and lesser votes for other categories listed. Again there is the exception that a considerable percentage would

<table>
<thead>
<tr>
<th>Table 3.3</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least Practical</td>
</tr>
<tr>
<td>I. Anatomy</td>
<td></td>
</tr>
<tr>
<td>(anatomy)</td>
<td>9.7</td>
</tr>
<tr>
<td>(micro-anatomy)</td>
<td>(1.6)</td>
</tr>
<tr>
<td>(histology)</td>
<td>(2.2)</td>
</tr>
<tr>
<td>II. Biological Sciences</td>
<td></td>
</tr>
<tr>
<td>(bio-chemistry)</td>
<td>26.1</td>
</tr>
<tr>
<td>(physiology)</td>
<td>(17.7)</td>
</tr>
<tr>
<td>(pharmacology)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>(bacteriology)</td>
<td>(2.6)</td>
</tr>
<tr>
<td>III. Dental Materials</td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>2.6</td>
</tr>
<tr>
<td>(oral diagnosis)</td>
<td>(3.3)</td>
</tr>
<tr>
<td>(periodontics)</td>
<td>(1.0)</td>
</tr>
<tr>
<td>V. Principles of Dentistry</td>
<td></td>
</tr>
<tr>
<td>(ethics)</td>
<td>31.2</td>
</tr>
<tr>
<td>(history)</td>
<td>(1.9)</td>
</tr>
<tr>
<td>(practice management)</td>
<td>(14.5)</td>
</tr>
<tr>
<td>(public health)</td>
<td>(10.1)</td>
</tr>
<tr>
<td>VI. Pathology</td>
<td></td>
</tr>
<tr>
<td>(oral pathology)</td>
<td>1.4</td>
</tr>
<tr>
<td>VII. Prosthetics</td>
<td></td>
</tr>
<tr>
<td>(crown and bridge)</td>
<td>(2.7)</td>
</tr>
<tr>
<td>(prosthetics)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>VIII. Surgery</td>
<td></td>
</tr>
<tr>
<td>(oral surgery)</td>
<td>1.3</td>
</tr>
<tr>
<td>IX. Orthodontics</td>
<td></td>
</tr>
<tr>
<td>X. Pedodontics</td>
<td></td>
</tr>
<tr>
<td>XI. Operative, et al.</td>
<td></td>
</tr>
<tr>
<td>(operative dentistry)</td>
<td>(2.7)</td>
</tr>
<tr>
<td>(laboratory techniques)</td>
<td>(1.2)</td>
</tr>
<tr>
<td>(clinical courses)</td>
<td>(—)</td>
</tr>
<tr>
<td>XII. Physical Sciences</td>
<td></td>
</tr>
<tr>
<td>XIII. Social Sciences</td>
<td></td>
</tr>
<tr>
<td>XIV. Residual responses</td>
<td></td>
</tr>
<tr>
<td>(left blank)</td>
<td>11.1</td>
</tr>
</tbody>
</table>
like to see the course in Practice Management (or Dental Economics) given more emphasis.

In Table 3.4 we would like to call attention especially to the residual responses at the end of the table. Note that a very considerable percentage left the question blank or specifically said that they would eliminate none of the courses. Many students wrote in the statement that they felt that all of the courses that they had been exposed could be safely eliminated. Perhaps they wanted to change the emphasis on some or improve the instruction in some, but they did not feel that any of the areas to which they had been exposed could be safely eliminated. We feel that the fact that these large portions left this response blank or specifically said that they would eliminate nothing indicates a vote of positive confidence in the over-all dental curriculum from a considerable portion of these student bodies, totaling in fact, 27.6 per cent.

It is quite evident that what the students want is more emphasis and concentration on courses that we can label best under the term “How to Do it Courses.” They want to have eliminated or played down those courses that require them to master the foundation courses, the basic Biological Sciences, and, with the possible exception of Practice Management, those courses that would contribute to their general understanding of the field of dentistry in its ethical, professional, and communal relationships. These features taken together certainly must be regarded as lending support to the view that dental students want to become “practitioners” rather than professional practitioners. To this extent, at least then, these impressions lend some weight to the concept of the “mechanic in the white coat.”

It was also readily apparent in reading through these more than 2,500 questionnaires that there is some poor teaching in dental schools practically everywhere.

<table>
<thead>
<tr>
<th>Table 3.4</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More Emphasis</td>
</tr>
<tr>
<td>I. Anatomy (anatomy)</td>
<td>4.3</td>
</tr>
<tr>
<td>(micro-anatomy)</td>
<td>(3.8)</td>
</tr>
<tr>
<td>(neuro-anatomy)</td>
<td>(—)</td>
</tr>
<tr>
<td>II. Biological Sciences (bio-chemistry)</td>
<td>10.8</td>
</tr>
<tr>
<td>(physiology)</td>
<td>(—)</td>
</tr>
<tr>
<td>(pharmacology)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>(bacteriology)</td>
<td>(8.8)</td>
</tr>
<tr>
<td>III. Dental Materials</td>
<td>(—)</td>
</tr>
<tr>
<td>IV. Medicine (oral diagnosis)</td>
<td>22.2</td>
</tr>
<tr>
<td>(endodontics)</td>
<td>(11.3)</td>
</tr>
<tr>
<td>(periodontics)</td>
<td>(1.3)</td>
</tr>
<tr>
<td>V. Principles of Dentistry (ethics)</td>
<td>7.5</td>
</tr>
<tr>
<td>(first aid)</td>
<td>(—)</td>
</tr>
<tr>
<td>(history)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>(practice management)</td>
<td>(6.4)</td>
</tr>
<tr>
<td>(communication)</td>
<td>(—)</td>
</tr>
<tr>
<td>(public health)</td>
<td>(—)</td>
</tr>
<tr>
<td>VI. Pathology (oral pathology)</td>
<td>5.3</td>
</tr>
<tr>
<td>VII. Prosthetics (crown and bridge)</td>
<td>13.4</td>
</tr>
<tr>
<td>(prosthetics)</td>
<td>(5.1)</td>
</tr>
<tr>
<td>VIII. Surgery (oral surgery)</td>
<td>11.9</td>
</tr>
<tr>
<td>IX. Orthodontics</td>
<td>4.3</td>
</tr>
<tr>
<td>X. Pedodontics</td>
<td>1.9</td>
</tr>
<tr>
<td>XI. Operative, et al. (operative dentistry)</td>
<td>7.1</td>
</tr>
<tr>
<td>(laboratory techniques)</td>
<td>(4.1)</td>
</tr>
<tr>
<td>(—)</td>
<td>(1.5)</td>
</tr>
<tr>
<td>XII. Physical Sciences</td>
<td>(—)</td>
</tr>
<tr>
<td>XIII. Social Sciences</td>
<td>(—)</td>
</tr>
<tr>
<td>XIV. Residual responses (left blank)</td>
<td>4.0</td>
</tr>
<tr>
<td>(&quot;none&quot;)</td>
<td>(3.6)</td>
</tr>
<tr>
<td>(—)</td>
<td>(17.3)</td>
</tr>
</tbody>
</table>
Probably in certain areas very poor teaching materials are available, so that some courses can be made more interesting with revision of the material itself. A frequent comment of students was that they would eliminate such and such a course, “at least the way it is being taught here,” or they indicate that they would like to see a course given more emphasis but “not the way it is being taught here.”

It will be noted that the Social Sciences listed among earlier course groupings are nowhere mentioned with as much as 1 per cent responses in these tables. Given the question of Public Relations, the well-known negative public response to dentistry, it seems that this is a rather deplorable finding. A very small group of students, 20 in number, felt that they would like to have more in the field of Psychology, of doctor-patient relationships, but almost equally as many (16) would like to see these kinds of topics eliminated from the dental curriculum. No one but the dentist can improve public reaction to and acceptance of dental practices. The best and most immediately available place for improvement in public relations is in the dental office. From the finding that we have virtually zero response regarding the curriculum in this area, we must conclude that dental schools practically everywhere have offered little to this area.

I was somewhat shocked to find frequent negative mention of the courses in Dental Materials. It seemed to me that this was utterly without reason. Dental Materials, from my point of view as a layman toward dentistry, I felt should be a fascinating course for dental students. Here we are dealing with the subject matter concerned with the basic materials with which the dentist will be working, particularly in the whole range of restorative dentistry. On questioning many dentists in practice, I learned that this is another area in which there is widespread poor teaching and poor teaching materials. Such courses are very often termed Metallurgy, and I am informed that the courses are taught with very little attempt to relate the subject matter to dental practice itself.

In final summary of this material on the curriculum, it seems to me that it points definitely that there needs to be broad, new, and revitalized curriculum planning in virtually all dental schools. Only a few of the schools, that we could determine from our responses, seem to be plunging into new, vigorous, and progressive areas, giving adequate attention to sounder teaching methods as well as to curriculum integration. We can applaud those schools, but it would be impolitic to mention them here.

Peers—Problems and Experiences

The relationship with one’s own peers, while going through years of dental school, can and apparently does have considerable effect on the development of both positive and negative attitudes about professionalism. Table 3:5 reproduces the responses to an inquiry about practices of fellow students and the extent that these might be annoying. This portion of the questionnaire drew an unexpectedly strong negative response on all the categories. Giving the category “very annoyed” the score of 1, “fairly annoyed” 2, “not especially annoyed” 3, and “not at all annoyed” 4, but not giving a score to “have not met this situation”, I computed the average score for each of these practices. It remains merely to point out that consideration for patient’s feelings was felt to be the most serious act that fellow students could do, but that seeming to regard dentistry just as a means of income as I indicated earlier, is not especially annoying and not at all annoying to a fairly appreciable portion.

Table 3.5

<table>
<thead>
<tr>
<th>Score:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>(none)</th>
<th>Have Not Met This Situation</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Annoyed</td>
<td>802</td>
<td>1,006</td>
<td>352</td>
<td>77</td>
<td>339</td>
<td></td>
<td>1.86</td>
</tr>
<tr>
<td>Fairly Annoyed</td>
<td>31%</td>
<td>39%</td>
<td>14%</td>
<td>3%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Especially Annoyed</td>
<td>1,213</td>
<td>1,047</td>
<td>236</td>
<td>42</td>
<td>40</td>
<td></td>
<td>1.64</td>
</tr>
<tr>
<td>Not at All Annoyed</td>
<td>47%</td>
<td>41%</td>
<td>9%</td>
<td>2%</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have Not Met This Situation</td>
<td>1,208</td>
<td>972</td>
<td>161</td>
<td>28</td>
<td>208</td>
<td></td>
<td>1.57</td>
</tr>
<tr>
<td>Seemed to regard dentistry just as a means of income</td>
<td>859</td>
<td>878</td>
<td>563</td>
<td>115</td>
<td>161</td>
<td></td>
<td>1.96</td>
</tr>
<tr>
<td>Average Score</td>
<td>33%</td>
<td>34%</td>
<td>22%</td>
<td>5%</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When a Student:
1. Was discourteous to a faculty member
2. Asked questions just for effect
3. Was inconsiderate of a patient’s feelings
4. Seemed to regard dentistry just as a means of income

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Have Not Met This Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>Very Annoyed</td>
<td>Fairly Annoyed</td>
<td>Not Especially Annoyed</td>
<td>Not at All Annoyed</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>802</td>
<td>1,006</td>
<td>352</td>
<td>77</td>
<td>339</td>
</tr>
<tr>
<td>2</td>
<td>31%</td>
<td>39%</td>
<td>14%</td>
<td>3%</td>
<td>13%</td>
</tr>
<tr>
<td>3</td>
<td>1,213</td>
<td>1,047</td>
<td>236</td>
<td>42</td>
<td>40</td>
</tr>
<tr>
<td>4</td>
<td>47%</td>
<td>41%</td>
<td>9%</td>
<td>2%</td>
<td>2%</td>
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<tr>
<td>5</td>
<td>1,208</td>
<td>972</td>
<td>161</td>
<td>28</td>
<td>208</td>
</tr>
<tr>
<td>6</td>
<td>47%</td>
<td>38%</td>
<td>6%</td>
<td>1%</td>
<td>8%</td>
</tr>
<tr>
<td>7</td>
<td>859</td>
<td>878</td>
<td>563</td>
<td>115</td>
<td>161</td>
</tr>
<tr>
<td>8</td>
<td>33%</td>
<td>34%</td>
<td>22%</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Peers—Problems and Experiences

The relationship with one’s own peers, while going through years of dental school, can and apparently does have considerable effect on the development of both positive and negative attitudes about professionalism. Table 3:5 reproduces the responses to an inquiry about practices of fellow students and the extent that these might be annoying. This portion of the questionnaire drew an unexpectedly strong negative response on all the categories. Giving the category “very annoyed” the score of 1, “fairly annoyed” 2, “not especially annoyed” 3, and “not at all annoyed” 4, but not giving a score to “have not met this situation”, I computed the average score for each of these practices. It remains merely to point out that consideration for patient’s feelings was felt to be the most serious act that fellow students could do, but that seeming to regard dentistry just as a means of income as I indicated earlier, is not especially annoying and not at all annoying to a fairly appreciable portion.
The inquiry concerning incidents that have detracted from the idea of professionalism drew a very strong response about the activities of fellow students. Although I can quote only a small sample of these responses, comments similar to these were found in responses from nearly all schools.

CASE NO. 21009—“Seeing several of the high ranking students of my class cheating on tests. Also the vast amount of stealing of equipment.”

CASE No. 09043—“At a dental supply company clinic at one of the prof. frats. This past year several of the seniors’ attitudes and reaction was extremely immature and disrespectful.

“Samples (and materials brought for demonstration) were stolen from the salesman before he had a chance to offer them as gifts or demonstrate their properties.

“I left the meeting early. I wanted nothing to do with this selfish ‘take all and give nothing’ attitude!”

CASE No. 37043—“Stealing of equipment by fellow student”

Cheating by students, particularly on tests, seems to be rather prevalent. Stealing is somewhat less prevalent, but it does appear to be particularly heavy and serious with this 1962 class in five or six schools. I am sure those schools are quite aware of the problem this year in their institution, and very frankly I suspect that prevalence of stealing is due to the presence of a few difficult cases in certain classes, so that the incidence of stealing may come and go in waves at various schools depending on the composition of the graduating class.

In addition to the essays indicated here, I would like to mention the additional factor that in certain places, excessive drunkenness and bawdy behavior at the professional fraternities was something that many of the students mentioned as being disgusting to them and detracting from their idea of professional behavior. It is my feeling, however, that the essays that illustrate these points speak for themselves.

Another question attempted to gain some perspective on student attitudes toward problems they have to face. The question is “Professional students frequently talk over problems they have to face. What is the main problem that others most often mention to you?”

Although a minority of responses mentioned more than one kind of problem, it was relatively easy to categorize the bulk of them. In general, it is a fair assumption on questions of this nature that what is reported is the student’s own perception of the major problem rather than simply a report of the problems that are mentioned to him by other students. The accompanying Table 3.6 lists the major problem areas mentioned by the respondents. Within each of the problem areas are indicated the specific categories that contribute most to the general response area. It is obvious that the immediate, pressing questions are those that are given the greatest attention. The time between completing the questionnaire and graduation was approximately four months; consequently those things that are viewed as the greatest problems are those of meeting the immediate requirements to graduate, difficulties with instructors, completing clinical requirements, and, of course, finances. Finances in general are a problem. Quite often the response to this item was simply a single word “money,” or “finances.” This is why under “money” the subheading “finances in general” accounts for 16 per cent of the 22 per cent who made some type of money response. There is, of course, some overlapping between the category of Finances, particularly as related to financing an office and surviving the initial years of the cost of the practice, and the items under Establishing a Practice. This is especially true with relation to the second sub-category “establishing a successful practice,” often phrased as establishing a practice with a good clientele. In attempting to categorize such responses, it has been impossible to make such fine distinctions as this. It is equally important to note, however, that the answers coded in the area of Establishing a Practice are equally pressing as being immediate problems. The 12 per cent that are indicated as feeling that selecting a location is a pressing problem can, in all likelihood, be assumed to be that portion of the student body who at the date of our questionnaire had not committed themselves to military service, the U.S. Public Health Service, secured entry to a internship or admission to graduate studies, or had not made definite plans and arrangements for entering into private practice or associated practice.

Doing something about getting started in practice, and selecting a location for it, then is clearly pressing for this group. This level of anxiety about where to practice may seem small to some and large to others, but it can be readily understood when we realize that over 55 per cent of this graduating class had already, at the time of our questionnaire, committed itself either to the military service, the public health service, or had secured entry into graduate studies. Of this number, 43 per cent are those who
have definite commitments to military service, or have applied for it. The remaining 2 per cent who indicate that military service is a problem seem to be that few who are teetering on whether to try to enter practice and wait to be called into military service, hoping somehow it will never happen, or to enter military service and get it over with.

In Table 3.6 to the questions of technique, there is almost no concern expressed for questions of speed or quantity. Quality, feelings of inadequacy to handle difficult clinical problems, problems of prosthetics, crown and bridge techniques, work in oral surgery, and variations in diagnosis account for most of these feelings that aspects of technique constitute outstanding problems. The 1 per cent under the category of Professional Status Problems are accounted for by students who complain about negative attitudes toward dentists, the stupidity of some dentists in practice (because, for example, of the poor workmanship students have seen), the relatively lower caliber of dentists as compared to physicians, and the lack of capacity for the dentist to attain “real” professional status in view of his years of study. As one student put it, “the little prestige and recognition one can get for all this work.”

The remaining responses were scattered rather widely among a variety of topics; one group of which seems to be important to a number—the necessity to work while going to school, the prolonged time in this kind of student status, fatigue, the mental strain of school, the problems related to relationships of the dental student and his family and their reaction to his difficult commitments.

One important feature of the listing of major problems is the extremely short-range focus of most of them. If the same question were asked of men in practice, rephrased as reference to the dentist and his professional colleagues at time five or ten years in practice, there would probably be no references to school problems, questions of selecting a location, and the military service. It can be predicted that at that time questions relating to technique, how to handle a certain aspect of practice, practice management in and of itself, and questions of professional status or related problems would loom far larger than they do here. At that time, although this is only a guess, there should be more references to problems concerning the role of the dentist in the total community. These, of course, are merely speculative predictions, and the total impact of problems the students have given now is that they contain virtually no concern about the longer range problems of dentistry. Problems, as these students have stated them, are immediate and personal.

Nowhere is there a reference from a student to the extremely difficult and enormously pressing problems of the generally declining ratio of dentists to the total population in view of the fact that the number of dentists is not increasing as rapidly in proportion as the total population. The rising average age of dentists in general practice is not mentioned, nor do they attend to questions of the possibility of demands for dentistry and provision for dentistry to that approximately 35 to 40 per cent of the population in low income class groups who do not now receive even minimally adequate dental care. I would like to propose to the reader that the very fact that we find no mention of

<table>
<thead>
<tr>
<th>Major Problems</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Problems</td>
<td>37</td>
</tr>
<tr>
<td>Entering Practice</td>
<td>25</td>
</tr>
<tr>
<td>Money</td>
<td>22</td>
</tr>
<tr>
<td>Technique</td>
<td>8</td>
</tr>
<tr>
<td>Military Service Questions</td>
<td>2</td>
</tr>
<tr>
<td>Professional Status Problems</td>
<td>1</td>
</tr>
<tr>
<td>Other Problems</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3.6. Major Problems
such broad scale problems is almost prima facie evidence that instruction in dental schools does not give serious concern to such matters, at least not in sufficient depth and intensity to communicate to the students. The suggestion is apparent that dental faculties everywhere, with the exception of only small numbers of people in certain selected dental schools, do not concern themselves sufficiently and deeply with the question of providing a basic health service to the total community. Instead of finding the student deeply concerned with how he can learn better methods so as to give broader service to an ever increasing public demand for dental services, these students are more concerned with how they can establish a successful and lucrative practice.

In brief then, unless dental faculties, as a whole, take deep, pertinent, and immediate concern to these longer range problems they shall not communicate them to graduating students. Again I caution, as I have before, that this lack of concern for basic service to the total population is one of the most certain ways to bring the control of dentistry under public regimen.

**Instructors and Instruction**

While in dental school the student develops his awareness of the role of the professional man through a series of experiences with significant groups of people, and by observing the relationship between other professional men and these groups of people. He comes to know and experience relationships with a variety of other dentists already in practice, sometimes through attending local meetings of the dental society, through attending national meetings when he can, and state meetings as they are available to him. Second, he comes to observe reactions of people in the general public to dentists, and to himself—already partially beginning to fill the role of dentist in his clinical activities. Third, he observes the reactions of men in other professions to the dentist and to himself as a person who is about to become a dentist. Fourth, and perhaps most important, is the immediate and continuing example of professional role which he can observe and against which he can test his own reactions as exemplified by his immediate instructors in the dental school. The development in each person of his concept of an appropriate role for himself comes about through those systematic interactions with significant other figures, and it is through observing, emulating them, from “putting himself in their shoes” that he comes to acquire a set of behaviors and attitudes appropriate to the role that he will eventually enter.

In the earliest years, this learning of a concept of self and social role comes about of course through interaction with the mother and father; later on with peers in school and with teachers with other members of the community, figures of authority, and the like. The student in a professional school is learning the appropriate professional roles, as he can only learn them at this time of life, through interaction with, and experiencing professional people acting out the role of behavior that they feel is appropriate to the position. It is for this reason that the actions and behaviors of every person instructing in a dental school, and of every dentist in the general public with whom students may come in contact, are extremely important for the formulation of the student’s attitudes toward professionalism.

Throughout our records, the students in virtually all schools had occasion to mention that their relationship with particular instructors, heads of departments, outstanding dentists, and specialists did the most to form their idea of proper professional behavior. At one point in the questionnaire they were asked to name the kind of person or sort of person after whom they would most want to mold themselves; an extremely high number of the students named a particular dentist, a certain instructor, department head, or dean in the dental schools. This is well and it speaks highly for the character and dignity of these particular men who stand as models of professionalism to their students. Some of their short essays illustrate this matter:

**Case No. 15027—“Discovery of men in the profession who have a high degree of intelligence and who are seriously concerned with the scientific progress of dentistry.”**

**Case No. 15079—“No particular incident has occurred with me. The step from pre-clinical to clinical years with instructors and people, (patients) calling me Doctor was the biggest boost to my feeling of professionalism.”**

**Case No. 15037—“The willingness of an anesthesia instructor to let me go ahead on my own with a difficult injection.” “The willingness of an oral surgery instructor to let me do multiple extractions, and finish before he checked the ridge.”**

**Case No. 15094—“After leaving the freshman & sophomore years behind and entering into junior year. The last two years one is treated like an adult, not like a child like they do in the first two years of dental school. When treated like an adult you feel proud to help people and you realize that you are becoming a professional man.”**
Case No. 15096—“This experience of feeling you belong in profession first began in my junior year when one of my professors began calling me doctor and in instructing his field he tried to stress the importance of his field and its application.”

Case No. 15078—“I had cemented two gold inlays and was complimented on them as being a very nice piece of work esthetically and functionally by one of the most respected members of the faculty.”

The other side of this picture is a comparatively sordid one. There was only one school in all of the 52 surveyed in which there was not repeated mention of improper and degrading behavior on the part of the dental school faculty, particularly with reference to the instructors on the clinic floor. From only one school are we able to gain an impression from these student reports that the faculty there consistently conducts itself in a serious, gentlemanly, and considerate professional manner. These comments were so shocking when I first read them that I found it difficult to give them such general credence; consequently, I interviewed several dentists in practice, men who had been trained in a variety of different schools. They all confirmed that this was so in their own experiences, and none of them was surprised to find it as strongly expressed in the opinions of these students. Following, again, are a series of our short excerpts to illustrate this very general and very regrettable situation:

Case No. 15095—“The difficulty in locating an instructor when one is needed desperately.”

Case No. 01045—“Uncontrollable temper streaks—a lack of tact and diplomacy, a lack of consideration and foresight on behalf of administrators to those who in a period of weeks will be alumni of the school. A lack of consistency in policy.”

Case No. 21102—“The treatment and attitudes toward students by the instructors in dental school. I realize some men are narrow, but there is no place for perverted egotism in a professional institution.” “The continual harassment of the student by a few teachers is very non-professional.”

Case No. 01026—“It is the responsibility of the instructors to guide and teach as they check in the clinic, however, I feel that it is quite unprofessional for the instructor to tear down a student’s work in front of the patient. The student must maintain the confidence of the patient in order to do successful work. If the instructor needs to criticize the student’s work I feel this should be done away from the chair.”

Case No. 21048—“When I see an instructor address a student in an inflammatory manner.”

Case No. 10047—“Instructors who berate students in the presence or earshot of patients or colleagues instead of taking them to one side and discussing the matter as gentlemen or professional men; lowers the instructor—a profession man in the mind of the student & of the patient; and it should be of himself too.”

Case No. 10X44—“The most common incident which has detracted from my idea a professional behavior is the superior and frequent lack of interest a member(s) of the teaching staff show toward a student who wants to learn. Questions frequently asked in sincerity are looked upon as silly by members in the field.”

Case No. 27050—“Having repeatedly been reprimanded in class for tardiness and those who do not attend. This is unfair to those of us who do attend. Also hearing professors tell ‘so called stories’ about their professional colleagues.”

From these two sets of excerpts we can derive some general statements about the students feel a professional man should be like in dentistry and what he should not be like. He should be intelligent, seriously concerned with the scientific progress of dentistry. He should treat the students with the seriousness and respect due to any human being. He should give praise where it is due. In all of his actions he should hold out a model of behavior to the student, impressing him with the importance of his work and with the total field that he is entering. He should not use vulgar, obscene, and derogatory language toward the student especially on the clinic floor and in front of patients. (Incidentally, a few students, not illustrated here by quotations, mentioned that they were particularly shocked when this occurred in front of pedodontic patients.) He should not harass the student and treat him in a supercilious manner. He should be available to the student to counsel with him on difficult points, or to check his work so that he can get on with his other requirements. Several students, in this last regard, mentioned instructors standing around smoking, and joking with each other, totally ignoring students who needed them on the clinic floor. A handful of students (although this was by no means frequent) also indicated that their ideal of professionalism had been seriously degraded by instances in which clinical instructors had been drinking prior to coming to work on the floor.
In Table 3-7, I have summarized the way the students responded to five situations as to how their instructors would react toward them and their classmates. Counting each column as though it earned a score from one to five, I have calculated from the frequencies given here the average scores for the various votes and have entered them in the final column. There was certainly no intention in my mind when I framed these questions that they would fall in this pattern. These average scores progress in an almost straight line from very low (strong disapproval) toward high (strong approval) as each successive question is taken up. Frankly, I am somewhat puzzled why there is such strong evidence of disapproval on item 1, students showing little or no interest in patients with routine dental problems. Possibly this arises because of the necessity for repeated practice in order to gain technical skills, in much the same way a musical instructor would disapprove of the piano student who failed to practice scales and arpeggios adequately. The second item, questioning an instructor’s judgment with respect to a clinical problem, is directly relevant to the question of sound instruction. That the students see instructors reacting negatively to this item is strong evidence, psychologically, that most instructors on the clinic floor are possibly young and are reacting to such questions out of their own insecurity in dealing with the teaching situation. This is possible evidence that clinical instructors, generally, are not those men of maturity and wisdom in the profession. It is definitely worth noting, however, that there is a slight rise in the frequencies in this row when we get to the column of “would approve mildly.” This indicates that there are a small number of instructors who not only tolerate but welcome such questions in order to do a better job of teaching. One student actually commented on this record when he checked “would approve strongly,” that “In this way the instructor can help us to learn.” Row 3 is admittedly a very ambiguous question. Many students probably reacted to the ambiguous nature of the question by checking the center box. On the other hand, a fair portion may have interpreted this as meaning an erotic attraction, and hence checked it toward the negative end. Question 4 attempts to gain some view of the school pressure for speed. Only a very small percent occur in the disapproval columns, and the greatest frequency is in the “would not care” bracket; but, note that there is a fairly high frequency in “approved mildly,” and a strong rise in frequency in the final column of “outstanding approval.” The over-all impression from this is that instructors are not pressing the students to be hasty in their work, but on the contrary, there seems to be a general climate of approval that the students work slowly and carefully enough to be right, rather than merely rush through their work. Finally, the fifth column shows the very strongest kind of approval is to be expected from instructors when the students have performed with outstanding quality, beyond the limits of an immediate assignment. Within a single table we see clear evidence of points that may be interpreted in a negative direction regarding the quality of instruction and others interpreted in a positive direction regarding the general nature of instruction in dental schools.

Effect on Professional Attitudes
An overview of the above material on how experiences in the dental school affect the students’ professional attitudes is not an easy one, because data, the evidence, is mixed in such a way that conclusions could be drawn in both negative and positive directions. So far as the curriculum is concerned, there is a strong trend in the data that students desire those courses of a practical nature that are directly applicable to the work they will be doing in the dental office in future years. There is an avoidance of, a distaste toward, and an unwillingness to accept those courses that will improve his stature basically as a scientist. In brief, the dentist, or at least the dental student, rarely shows a desire to become a learned man. I think it goes without saying that the reader will, by this time, have received a clear impression from the essays quoted from these students that, as a body, they show very little capacity to handle written communications. Spelling even of simple words is atrocious; sentence structure is often impossible, only a very few respondents showed a genuine capacity to write clear sentences, to join these sentences into expressive paragraphs. Dental students, whenever they mention it, seem to dislike those courses in Oral and Written Communication, in scientific writing, and in dental literature to which they have been subjected. From the point of view of one outside of the profession, these records have exhibited such a degree of inadequacy in handling basic English as to call for concerted action in dental education.

There seems to be an extraordinarily high degree of competitiveness between students in dental schools focusing on grades and completion requirements. Again there is an impression, although it is impossible to check this in the statistical data, that these kinds of mentions and those referring to cheating were most frequent in those schools most strongly characterized by authoritarian attitudes. It is in that kind of an atmosphere that cheating and “Boot Licking” is obviously most apt to prevail.
In those schools where the students seem to be treated with more respect as an adult, there seems to be far less mention of these practices.

The impact of instructors and instructions on the growth of professional attitudes in dental students is another mixed picture. There must be everywhere (in virtually all dental schools), some outstanding dentists, teachers, and gentlemen who are capable of instructing so as to stimulate and inspire their students. These are the men students want to emulate, that they name as persons after whom they would like to model their own behavior and their own careers. But, practically from every school, there are also comments about the misconduct of the instructors, their violent, domineering, supercilious attitudes and language, lack of concern for the student or the patient, of the use of vulgar and even obscene language to students and other instructors in front of patients. It is clearly evident that at least a portion of the instructors are seriously immature, if not actually emotionally disturbed individuals. Many people entering the field of dentistry may have the attitude that landing a post as clinical instructor will help them to tide over financially in the first two or three years of their practice, but once established in practice they plan to drop out of teaching entirely. These kinds of instructors have no necessary interest in education and are not apt to be motivated to be good teachers. It seems that these matters are sufficiently serious and sufficiently widespread as to call for a housecleaning of dental education. The dental school itself will have serious impaired the possibility of bringing student bodies to a fuller realization of professional attitudes until this is done.

In spite of the seriousness of the problem just mentioned, I wonder, however, if the matter of poor teaching is not an even more serious one. Dull, repetitious, boring, insipid presentation of material can do much to wear down a student’s spirit as anything. It is notorious in the United States that the worst teaching, as well as some of the best, is to be found in our institutions of higher learning. One qualifies as a teacher for such an institution by having a professional or advanced degree in one of the humanities, sciences, or professions. Naturally, such a person may know nothing about how to teach. The reverse is true in our elementary and secondary schools, where the average teacher has had hundreds of hours of instruction in how to teach many more hours in practice instruction with careful guidance in the field of education itself. The dental school is no exception in this total picture. Insofar as we have been able to learn only a pioneering few in the field of dental education have given intensive concern to this question of improving the quality of dental instruction itself. The field clearly needs better textbooks and teaching material in many areas. There is evidently a crying need to relate many of the basic sciences directly to dentistry so as to bring them alive to the student. This may be a more muted problem than the one of poor behavior; it may have a far more serious and depressing effect on the student in the long run. ■

### Table 3.7

**How would most of your instructors in dental school feel if you or your classmates were to do the following?**

<table>
<thead>
<tr>
<th>Score: (Answer for each)</th>
<th>1 Would Dissaprove</th>
<th>2 Dissaprove to Some Extent</th>
<th>3 Would Not Care</th>
<th>4 Would Approve Mildly</th>
<th>5 Would Strongly Approve</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Show little or no interest in patients with routine dental problems</td>
<td>1,442</td>
<td>943</td>
<td>170</td>
<td>4</td>
<td>3</td>
<td>1.51</td>
</tr>
<tr>
<td>2. Question an instructor’s judgment with respect to a clinical problem</td>
<td>862</td>
<td>1,110</td>
<td>199</td>
<td>288</td>
<td>101</td>
<td>2.08</td>
</tr>
<tr>
<td>3. Admit to being moved and attracted by a particular patient</td>
<td>299</td>
<td>801</td>
<td>1,257</td>
<td>144</td>
<td>31</td>
<td>2.53</td>
</tr>
<tr>
<td>4. Spend more than 30 minutes on examination and diagnosis</td>
<td>38</td>
<td>268</td>
<td>1,078</td>
<td>468</td>
<td>704</td>
<td>3.60</td>
</tr>
<tr>
<td>5. Do more than is basically required for your cases</td>
<td>28</td>
<td>61</td>
<td>331</td>
<td>707</td>
<td>1,431</td>
<td>4.35</td>
</tr>
</tbody>
</table>
Henry Chalfin DDS, FACD

ABSTRACT
A retrospective look at the history of medicine is highlighted by the relationship of trust and service that characterize the professions. This foundation for ethics is being challenged today by forces such as the rapid growth of managed care, the liberalized regulations on professional advertising, and the emergence of a better-informed public that is far less inclined to accept a doctor’s recommendation as the final word. While acknowledging a changing reality, dentistry–individually and collectively–must re-establish the primacy of ethics as the touchstone of professionalism.

The Past
Hippocrates (around 400 BC) is certainly considered to have had the greatest historical influence on medical ethics, but there were others before him. Papyrus records indicate that the practice of medicine was formalized over two thousand years earlier in ancient Egypt (Yeager, 2002). Imhotep (2725 BC) is recognized as having been the first physician. A short time later, Hesy Re (2600 BC) became noteworthy as chief of dentists and physicians to the pyramid builders. They and their contemporaries spent years in arduous training in the arts of interrogation, palpation, and observation (Redford, 2001). In ancient Mesopotamia, The Law Code of Hammurabi (1700 BC) included several early ethical references to the doctor-patient relationship, and to the liability of physicians (Gurley, 1961). The legacy of Hippocrates, however, was much more profound than any of these others. Not only are his teachings comprehensive, but they are also so fundamentally sound that they have withstood the test of time, having endured for more than two thousand years. The Hippocratic Oath, still taken today with modification, expresses the obligations and duties of physicians as they enter the medical profession. The Hippocratic Corpus consists of about sixty treatises covering areas from clinical experiences, treatment of injuries, the law, and physician’s behavior and responsibilities (Legasse, 2000).

From these ancient times until well into the twentieth century, the association between the physician and sufferer was rarely the product of the physician’s ability to produce a real cure. For the most part, the role of the physician was paternalistic—to give comfort and show concern, as well as to explain the nature of a disease and its prognosis (Yeager, 2002). This was a bond of trust and faith, with little expectation to actually alter the course of the illness. In this relationship, the patient was generally compliant, adhering closely to the recommendations of the physician.

The situation in dentistry was actually quite similar, even well into the 1930s.
Teeth were either excavated with primitive foot-pumped drills capable of 350 rpm or extracted. The patient had little choice but to go along with the recommendation of the dentist, with extraction the usual result. By middle age, the average American had already been resigned to the prospect of full dentures.

In 1942, however, the ability of the physician to dramatically alter the course of disease was finally realized with the discovery of penicillin, the first major effective antibiotic (Yeager, 2002). As a direct result, the historical relationship between doctor and patient began to change as well. As newer drugs and procedures became available, patients were given alternatives, as well as risks, to consider, and thus became a little more involved in their own treatment. The situation in dentistry could again be considered analogous, as higher speed drills, newer restorative materials, endodontic procedures and, eventually, implants provided alternatives, which dramatically elevated the level of dental care while ending an era of wholesale extractions. Early on, during this biomedical revolution, healthcare professionals enjoyed tremendous respect, and admiration from their patients. While they always had been revered for their altruistic view on professional obligation, doctors finally had the ammunition to really prolong and improve quality of life.

**THE PRESENT**

This dedicated commitment to the welfare of others, however, seems to be a thing of the past, as professional obligations have become obscured by the pressures and opportunities of a market-oriented society. In a recent article entitled “Why our ethics curricula don’t work,” Bertolami states, “The ideal that the patient’s needs come first is a noble sentiment, but rather untrue” and when the interests of physicians and dentists conflict with the interests of their patients, practitioners “can be reliably counted on to place themselves first” (Bertolami, 2003).

Any discussion of changing perceptions of professional obligation, should establish some basic understanding of what constitutes a true profession. Since there is no universally accepted definition, we can best describe it by looking at some of the basic characteristics common to all of the existing professions. Unfortunately, the term professional has lost much of its discriminatory stature because of the increasing number of occupations which have claimed professional status on the basis of the advanced education involved and the attainment of some certificate or license (Welie, 2004a). For the purpose of this discussion, we shall limit ourselves to the characteristics common only to the health professions.

Aside from the long formal education necessary to attain the required knowledge and expertise, and the necessary certificate or license, there are a number of other things which characterize any
true profession. All professions organize themselves into exclusive groups, which are allowed by law to practice autonomously and regulate their particular form of activity. This privilege is part of an implied social contract (Welie, 2004a; Manson, 1994), which, in turn, demands that the professionals not only perform with a high level of competence, adhere to a strict code of ethics, and act in a manner that will enhance the prestige of the profession, but that they also accept an altruistic obligation to one’s patients and the community at large. In return, the public allows the profession to act as a monopoly whose members can be expected to practice autonomously while enjoying above-average incomes and social status.

Unlike other occupations or trades, the nature of the professional relationship is a highly personal one in which the clients or patients routinely expose themselves, physically or otherwise, to the professional, who they allow to assume control over an important part of their lives (Manson, 1994). Consider the degree of trust necessary to permit a surgeon to access one’s most vital organs or a therapist one’s deepest, darkest secrets. For the patient, it is the stature of the professional which supposedly validates this complete exposure and submission. Specifically, the title of “doctor” is intended to instill confidence that this trust is well founded, and to give assurance that confidentiality will be maintained throughout the duration of this relationship. The patient or client is meant to feel secure that the professional will act totally in his or her best interests. Obviously, this relationship is very different from any other business relationship in which the term “caveat emptor” usually applies.

Traditionally the relationship between the professional and the patient has been a comfortable one for both parties, the doctor as the beneficent authority, and the patient in the submissive role. Among the various models of practice, this particular type of relationship is referred to as the Guild Model, in which the professional makes all the decisions based on the best interests of the patient (Ozar & Sokol, 2002).

This relationship has been changing, however, as patients have become better informed. Indeed, many shop around and do a fair amount of research before deciding on a professional. They also want to know much more about the nature of the proposed treatment, the alternatives, if any, and the nature of any potential risks involved before they ultimately consent to treatment. This type of relationship is representative of the Interactive Model, in which there is an exchange of ideas between doctor and patient, which ultimately determines the course of treatment (Ozar & Sokol, 2002).

The Interactive Model is the paradigm for present-day practices, because, in addition to being better informed, patients no longer have blind faith in their doctors. Much of this wariness is related to the dramatic increase of malpractice litigation during the last twenty years. This trend was fueled, in part, by a number of studies in the early nineties, which laid bare the very worst of medical practice. The Harvard Medical Practice Study, in 1991, concluded that “There is a substantial amount of injury to patients from medical management, and many of the injuries are the result of substandard care” (Brennan, Leape, Laird, et al, 1991). A study by the highly respected Institute of Medicine (1999) reported that health care in the United States is not as safe as it should be, with at least 44,000 and perhaps as many as 98,000 patients dying in hospitals each year as a result of medical errors that could have been prevented. The Joint
Commission on Health Care Organizations (2001) reported that since 1998, the number of operations performed on the wrong site or the wrong patient has increased dramatically in the United States. The Chicago Tribune reported in 2002 that 20,000 deaths yearly are directly related to insufficient hand washing by physicians. With doctors constantly on guard against the threat of litigation, and patients often suspicious about the quality of the care they receive, it is no small wonder that the doctor-patient relationship is not what it used to be.

Beyond the realization that doctors are fallible, however, it now appears that the honesty and ethics of doctors and dentists are also in question. For quite some time now, the Gallup Poll has conducted yearly surveys in which the public rate their approval of the various professions. Going back to the early and mid nineties, dentists, in particular, were consistently ranked near the very top of the list, but sadly, this is no longer the case. When those polled during the past five years were asked whether they considered dentists to have either high or very high ethical standards, approximately 70% answered in the affirmative. As a result, we now stand less proudly in seventh place, with nurses, grade school teachers, and military officers occupying the top three spots.

As we look for the reasons behind this apparent loss of trust, a number of things come to mind. As previously stated, the notion of altruistic professional obligation to one’s patients may be a thing of the past. When practices are run more like businesses than professions, and when elective procedures are actively marketed to patients, it starts to become obvious that the bottom line is the bottom line. Spurious advertising in newspapers, magazines, and other places, in addition to mass mailings, further contribute to the perception that the patient is merely a consumer who is being actively targeted for the ultimate benefit of the dentist. Furthermore, much of this advertising is highly unethical and misleading, falsely suggesting specialized training or expertise in certain areas such as cosmetic dentistry or the ability to treat phobic patients. Other practitioners promise free consultations or discounts, and then charge higher fees for radiographs or other procedures.

Another issue relating to this loss of trust involves the depersonalization of the doctor-patient relationship. The ever-increasing presence of managed care in medicine and dentistry has certainly been a major factor in this area. Unrealistic fee schedules for many procedures have resulted in the creation of a new generation of practitioners who feel they have to be extremely efficient and production oriented. Such a pressurized working atmosphere leaves little time for the dentist and patient just to talk. Unfortunately, there are no procedural codes to enter for building trust between dentists and patients—this most important part of the doctor-patient relationship. This is part of the larger problem of fraud, in which many practitioners have “learned” the art of creative code entry. Other unethical activities include the practice of redoing perfectly functional restorations for the sole purpose of increasing productivity and the failure to remake an inadequate new restoration. Reports of such activities are commonplace, citing untold millions of dollars in Medicaid and insurance fraud every year.

Regrettably, managed care is probably never going away. In addition to the loss of autonomy, it is understandable that many practitioners might feel somewhat bitter about inadequate compensation for their services. The problem is even worse for recent graduates, who are often heavily burdened with educational debt. Their first experiences in private practice may often be in production-oriented offices, many of which do not exemplify the highest standards of professional ethics. In addition to having to work long hard hours in order to be able to make a living while paying off their debt, many have to comply with production quotas, and may also be instructed to actively market elective procedures. Any ethical misgivings they might have about such practices must be dealt with under the duress of their own financial pressures. Some may feel that they don’t have the luxury of being able to stand by their principles at the possible risk of losing their jobs.

**The Future**

What then does the future hold for the profession of dentistry? As we drift farther and farther from the ideals of professionalism, are we, at some point, in danger of losing our professional status? The fact is that until the mid-nineteenth century, dentistry was considered more of a trade rather than a profession, and we very well could be going in that direction again (Welie, 2004b). Unfortunately, more and more practices today are reflective of Ozar and Sokol’s Commercial Model (2002), in which market conditions and business principles determine all interactions between doctor and patient. Offices that promote themselves as “Dental Spas” or “Smile Makers” also fall into this category. Production-oriented practices might not care about quality control or unethical activities as long as the numbers are...
good. And, if it takes some slightly misleading advertising to fill one’s schedule, business is business!

Of course, many of us are very unhappy with the direction in which our profession is heading, and fear that we have already lost the battle. How much any of us is personally affected by all of this depends very much about how he or she feels about the profession in the first place. There are any number of reasons why someone might choose to go into the practice of dentistry, and this choice is not always particularly well conceived. For some, it might represent little more than a perceived stairway to higher social status and a comfortable lifestyle. Others might be attracted to the autonomy or the personal interaction, while some might actually see it as an opportunity to perform a truly worthwhile service. The ultimate rewards for any individual would very much depend on what he or she sees when looking in the mirror at the end of each day. One who does the very best for each and every patient, who always strives to improve through continuing education, and who is involved in professional organizations, would probably be very content as well as very proud of what he or she does for a living.

At the end of the day, money is probably not the most important issue regarding personal fulfillment and overall satisfaction with one’s career. It is certainly understandable that each and every one of us wants to make a good living, and there is absolutely nothing wrong with that. This is certainly a reasonable expectation for one embarking upon the long, hard, and expensive road to a career in dentistry. However, to think only in terms of financial success, while omitting personal gratification from the equation, fails to acknowledge some of the most important rewards our profession has to offer.

Since it is painfully obvious that many among our profession are missing the boat, the question then becomes, “What can we do to re-professionalize dentistry?” With managed care and the current laws regarding professional advertising, it is unlikely that dentistry will ever return to what it once was. We may have to accept the fact that for some among us, practices will continue to be run more like businesses than professions. Having said that, we can still do a lot better than we are doing today.

The healing process will involve the determined efforts of those among us who truly believe in the ideals of professionalism. It involves better and more intense ethical training in our dental schools, as well as the dissemination of these ideals among the ranks of those already in practice. There are those who would suggest that ethics is something that cannot be taught, and that one either is or is not inherently ethical. Research has shown, in fact, that such is not the case.

A study in 1994 by Bebeau and Thoma, “The Impact of a Dental Ethics Curriculum on Moral Reasoning,” exposed seven hundred twenty students to thirty-nine contact hours of dental ethics over their four years of education. Using tests that measure moral reasoning, this group was compared to less-extensively trained classes. The results demonstrated a direct correlation between ethics instruction and moral reasoning development. In a subsequent article published in 2000, Bebeau states that some programs have been less successful because the ethics training was combined with jurisprudence. She concluded that this may be counterproductive, since jurisprudence establishes minimal legal standards, and may therefore represent the lowest common denominator.

Ethical training, on the other hand, inspires us to reach for the very highest ideals. She further suggests that, upon completion of ethical training, students should be required to put into writing their own perceptions of professional responsibilities. In this way faculty members will be able to assess the effectiveness of their ethical training programs, as well as deal with any misconceptions that may occur.

The American College of Dentists is a national organization of ethically minded dentists whose mission statement is “To promote excellence, ethics, leadership, and professionalism in dentistry.” In that spirit, the College has recently sponsored a series of ethics summits, which convened leaders from virtually all sectors of the greater dental community, in order to improve the ethics climate in dentistry. The third such summit was held in Orlando in January 2004 and focused on the increasingly important topic of truth-telling in dentistry. Many of those who participated in this ethics summit resolved to make it their personal responsibility to help disseminate the ideals of professionalism through articles, editorials, mentoring programs, and study club presentations, in addition to expanding the ethics training curricula in the dental schools and postgraduate programs. It was also suggested that state governing bodies be encouraged to legislate for periodic mandatory workshops in ethics and professionalism.
The task of regaining the public trust belongs to each and every one of us. We must all strive to be better and take our professional obligations more seriously. We all must speak out against unethical practices whenever we see them. We can do this individually, or we can call upon our existing professional organizations to exert their influence when necessary. That we are able to regulate ourselves is an assumption inherent in the social contract, which grants us our very autonomy. We need to do a better job of elevating the standards by which we practice, or risk losing much of this autonomy. As Dr. Bruce Peltier (2001) has stated: “Professional autonomy...is not a given, and it does not exist in a vacuum. Dentists have watched the recent decline of professional autonomy in other professions, including medicine. There are threats lurking for dentists as well.”

As we look to the future, the problems of managed care, professional advertising, and financial pressures will still be there. In order to regain the public trust, we will have to re-instill the ideals of professional ethics from within. More in-depth training in this area will be necessary in our schools and post-graduate programs. Periodic mandatory workshops should be required for those already in practice. Our existing professional organizations will have to do a better job of reacting to unethical practices whenever they are reported. Finally, each of us must make the personal commitment to contribute individually to this effort. This can take the form of mentoring a young practitioner, writing an editorial, or promoting the subject at a study club meeting. If we are not able to right our own ship, we must face the eventual possibility that outside forces will do it for us.

References


High performance is difficult to maintain because it is dynamic and not well understood. Based on a synthesis of many sources, a model is proposed where performance is a function of the balance between capacity and challenge. Too much challenge produces coping (or a crash); excess capacity results in boredom. Over time, peak performance drifts toward boredom. Performance can be managed by adjusting our level of ability, our effort, the opportunity to perform, and the challenge we agree to take on. Coping, substandard but acceptable performance, is common among professionals and its long-term side effects can be debilitating. A crash occurs when coping mechanisms fail.

"High performance" is universally coveted praise. A consistent level of excellence in outcomes is something to be proud of. When we have a “down day,” it usually means that we were not performing up to our expectations. We know peak performance when we see it—in ourselves and in others. We just probably haven’t thought much about the conditions that make for and maintain high performance. (The term is actually more commonly applied to equipment than to people, and getting top performance there is not much of a problem—we just buy it.)

The Chambers Model of Performance
One of the oldest principles in psychology, the Yerkes-Dodson Law, established a fundamental insight into performance. In 1908, these researchers explored the relationship between pressure to perform and performance outcome levels. This work established the notion that there is an optimal amount of pressure. When arousal (the actual word the scientists used) is less than optimal, results decline because the performer is unchallenged, pays insufficient attention, or invests inadequate or unsustainable energy. Routine amalgam preps become automatic for experienced dentists; most of them are good enough, but they are seldom examples of the dentist’s best work. On the other side of peak performance, excessive arousal hampers outcomes. Stimulation and emotions become hard to manage and behavior tends toward rigid habits, unresponsive to nuances of the situation. Paralysis and “choking” are the extreme examples of the damage overstimulation causes on performance. Candidates almost never produce their best amalgam preps on initial licensure examinations. If we knew how to “get in the flow,” we could maximize our performance.

The Basic Model of Performance
One of the oldest principles in psychology, the Yerkes-Dodson Law, established a fundamental insight into performance. In 1908, these researchers explored the relationship between pressure to perform and performance outcome levels. This work established the notion that there is an optimal amount of pressure. When arousal (the actual word the scientists used) is less than optimal, results decline because the performer is unchallenged, pays insufficient attention, or invests inadequate or unsustainable energy. Routine amalgam preps become automatic for experienced dentists; most of them are good enough, but they are seldom examples of the dentist’s best work. On the other side of peak performance, excessive arousal hampers outcomes. Stimulation and emotions become hard to manage and behavior tends toward rigid habits, unresponsive to nuances of the situation. Paralysis and “choking” are the extreme examples of the damage overstimulation causes on performance. Candidates almost never produce their best amalgam preps on initial licensure examinations. If we knew how to “get in the flow,” we could maximize our performance.

The Chambers Model of Performance
Based on a synthesis of the literature, some research, and years of experience with personal high and low outcomes, I have developed a refined model of performance. This is depicted schematically in the accompanying figure. It is an elaboration on the Yerkes-Dodson Law. There are four levels of performance (instead of Yerkes and Dodson’s three), and “arousal” is more precisely defined.

The four phases of performance are labeled “inability and boredom,” “high performance,” “coping,” and “crash.” The performance curve is not symmetrical on both sides of peak performance. We tend to truncate the left-hand side by avoiding boring situations and those where we are inept. Most of us, and especially professionals, live in the coping mode—pushing, rushing, and cutting corners to stay in the game even when we are not doing our best. Another elaboration on the Yerkes-Dodson approach is to realize that the phases of performance are qualitatively different and involve more than performance outcomes. They have a strong emotional...
character and even long-term life consequences. Boredom and the embarrassment of inability are experienced differently from the elation of peak performance. Coping means juggling stress and pressure, and as will be discussed below, it often has unhealthy side effects. A dentist with an office nitrous oxide system that he or she cannot use well wastes valuable time or stores it in the garage. High performance use of the equipment is selective, efficient, and satisfying. Coping might include routine overuse, nagging the staff, and the stress of coordinating patient management with treatment. The crash comes then the dentist starts using the system personally.

We can do better understanding the horizontal axis than sampling calling it “arousal.” We are bored with the familiar, those tasks that do not call on our full attention and talents, the things we don’t understand, tasks that matter little to us whether we do them well or not, and those things we couldn’t do even if we wanted to. Dentists seldom bear down and shine when they are cleaning the operatory, redoing work for an unappreciative patient, or using unfamiliar materials. On the other hand, a surplus of these same characteristics will also depress performance (or require compensatory support to stay in the game). Tasks that are overly technique-sensitive, unpredictable, novel, or unfamiliar, or when the outcome is critical, are rarely accomplished at the highest level. Let the patient have some hidden canals and make her the highly critical wife of your best friend, and it is unlikely that the dentist will be bragging at dinner. Keep this up for several months and thought will begin to creep in about selling to the associate a year or two earlier than originally planned.

I have expressed this relationship with a simple equation. What determines level of performance is the relationship between challenge and capacity. When
capacity exceeds challenge, performance will be in the boredom range; when challenge exceeds capacity, performance will be in the coping or crash range. It is necessary to use the relationship between two factors (rather than either capacity alone or challenge alone) in order to account for observed facts. A general practitioner may be confronted with coping or a potential crash by a bony impaction that would bore a surgeon; while the best level of performance on the same case may come from a resident. These are examples of fixed challenge and variable capacity. An example in the other direction would be asking a practitioner to meet with a few folks from Rotary, or with residents in a local GPR program, or to present at the Hinman about innovations in one’s practice.

Not only are the stages of arousal emotional and qualitatively different in character, they cannot be captured by objective criteria. Individuals will be bored, effective, struggling, or panicked depending on the way they define the situation.

Components of High Performance
Can we open up the concepts of challenge and capacity to reveal even more useful detail? I think so. Let’s begin with the formula \( Cp = A \times E \times O \) — capacity (leaving challenge aside for a moment) is a multiplicative function of ability, effort, and opportunity.

Ability
Obviously, ability is a key component in performance. Ability pushes toward the left on the performance curve. Those with limited ability will find themselves too often coping or crashing; while unused ability is almost a definition of boredom.

Ability can be thought of as trained aptitude. This gets at the notion that ability includes both the possibilities and the actualities of the performed. We tend to think of aptitudes as fixed potentials such as intelligence or strength or personal attractiveness, and we think of training as perfection of these potentials through learning. For example, it is a myth that dentists have a high degree of digital dexterity (aptitude) that is honed though years of education and practice (training). (Research has consistently shown that dentists, thoracic surgeons, and others have an average level of dexterity aptitude. The part about honing skills through education and practice is, however, true.) Digital aptitude can be lost through disuse, age, or illness and trauma. Learning normally improves ability—bad habits being the obvious exception. It is best to think of aptitude as setting a limit on learning and both of them being harmonized and strengthened to an appropriate level in a professional. The language about “you can do anything” is mostly advertising hype aimed at the Baby Boomers. I, for example, have given up on becoming a world champion Sumo wrestler. My age is against me.

Effort
Effort means motivation. I like the term effort better because it avoids the misconception that motivation is an enduring personal characteristic (“He is a motivated individual”). Motivation, properly understood, entails episodic effort focused on a specific task. Effort on building a practice means less effort elsewhere. Effort is also left-pushing on the performance curve. Coping requires a lot of effort; flow is a natural blending of effort and task; boredom is a desperate attempt to conserve effort.

Opportunity
The component so often overlooked in analyses of performance is opportunity.
This refers to the equipment, circumstances, structure, material, and everything else a talented and willing performer needs to perform. A few CE courses and a desire to do implant dentistry will be impeded if few patients in the practice are interested in such treatment and until the necessary equipment is purchased. The ADA has long maintained that the apparent shortage of qualified and willing practitioners will be compensated for by improvements in technology. Many talented and dedicated dentists are underperformers in organized dentistry because of the limit on formal leadership positions. Opportunity, like ability and effort, leans left on the performance curve.

The stress of coping and the panic of the crash are often the direct result of opportunity. Boredom is sometimes a flight to hide from opportunity. If the last part of this claim seems paradoxical, reflect on how often we make excuses for not taking advantages of the chances at hand or even sabotage them.

The three elements of capacity (ability, effort, and opportunity) all point in the same direction—more of each increases capacity. But it is not as simple as it may seem. The elements are not directly compensatory. What one lacks in ability cannot normally be made up in effort, for example. Lavish opportunity will not overcome a deficit of ability. Psychologists call the relationship that exists among the three elements of capacity “multiplicative”—hence the * symbols in the equation. (The mistaken view that we can make up for shortcomings in one area through pluses in others is called the compensatory or “additive” notion.)

In practical terms, this means that capacity can be most effectively increased by raising the level of the lowest element. Remember that anything multiplied by zero is still zero. A moment’s fiddling around with the arithmetic of multiplicative relations will confirm this point, and the parallel point that in additive relationships the smart strategy is to improve the element that is easiest to improve.

It should also be stressed, especially for those who view the world competitively and are self-improvement mavens that increasing capacity is not always the royal road to high performance. When capability exceeds challenge, any perfection of ability, effort, or opportunity actually decreases performance and builds emotional distress. This is a common mistake among hard-charging professionals whose careers have reached a plateau. Because they are bored, they use some of their excess capacity to build their assets, which creates a multitasking coping overload at the same time they increase the psychological management burden of new capabilities that are underused. Trying to improve performance exclusively through training and effort invites a vicious spiral of coping and boredom.

**Challenge**

Challenges matter. The psychologist Edwin Locke is emphatic in saying the literature on performance proves that no other factor is more important than having high goals. I take a slightly different view that it is the fit between capability and goals that matters.

There are three kinds of challenge: 1) the challenge as given, 2) the challenge as understood, and 3) the challenge as negotiated. Let me illustrate this with the example of a very challenging patient. Not only is the case large and complex from the dental point of view, but there are medical, psychological, and financial difficulties. Multiple specialists will be involved; the patient freely confesses that she has had unsatisfactory relationships with two previous dentists. The “challenge as given” might be something like, “Make me look like Julia Roberts, and try to keep it under $2000.” The “challenge as understood” would probably be something more akin to “Once I get an understanding of the extent of this mess, perhaps I can talk her into a sequenced-treatment plan that addresses her oral health needs.” One can only imagine what the negotiated challenge might be because this step is too often omitted in dentistry.

The point is that challenge, including its multiple levels, will call into play and make use of one’s levels of ability, effort, and opportunity in different ways and with different outcomes. In the example above, a regular participant on the CE circuit may salivate over this patient and photograph every attractive detail in case it turns out well. Many practitioners would proceed with caution; others would refer.

**Coping and Crashing**

Looking only at performance outcomes, it is not easy to distinguish between the degraded performance on one side of peak performance compared to the other. But the personal impacts of the diminished outcomes on the performer are significantly different. Coping is nothing like boredom.

Coping means getting by. It is less than optimal performance that is still good enough. Sometimes it comes from...
limited ability, effort, or opportunity, but most typically it is a result of overcommitment. This means the performer has chosen to work above his or her capacity. It is human nature to take on stretch projects; it is doubly human nature, and much easier to get into, to put more on one’s plate than can be handled effectively—even though each task is individually manageable.

The definition of coping is to perform continually at a diminished but acceptable level in situations that overwhelm resources. It is like taking out a loan. One doesn’t quite have enough to keep going, so the immediate challenge is managed by borrowing, usually recognizing that some form of payback will be expected later. “I need this coffee now to stay alert; I’ll sleep in on the weekend.” “I can compromise on the crown design and make it up in the overall case.” Let’s look at four common types of coping.

Compromise

Compromise in this context means redifining the standards of the task to better match the available resources. It might also be thought of as “taking short cuts,” “expediency,” and “lowering one’s standards out of temporary necessity.” It certainly saves time to have patients update their medical histories only every two or three years, to skip periodontal re-evolution appointments, to give standing orders for radiographs before the dentist examines the patient, and to meet the standard of care without having to perform optimal restorations every time. Delegating work that it is not prudent or legal to delegate, using unproven materials or procedures, and the passion for saving a minute on an appointment are also examples of redifining the task to match the stretched resources at hand. Almost every questionable dental practice I have ever heard of has been accompanied by some words to the effect that “it’s just a small thing, and I am pressed; but it is only temporary.”

The payback for compromise coping is loss of self-respect. It is unusual for anyone to lower his or her standards for a short period of time and then raise them again. The most common way standards are challenged is through lawsuits or having one’s license disciplined. Compromise below the standard of care is illegal; having standards that are so low that failure is not uncommon is unethical; standards that are not up to the level of what one is capable of achieving rob one of his or her self-respect.

Rationalization

There is a wide range of cognitive coping strategies. They share the common feature of discounting the significance of poor quality work. “This isn’t the kind of patient who would really appreciate the finest quality of work.” “Considering the stress this office has been under, that was not a half-bad outcome.” “Who really wants to be a Michelangelo of dentistry anyway?” There is a strong need in all of us to maintain harmony between our behavior and our values. “It is wrong to lie, although I kind of did that on my taxes.” There are three ways out of these difficulties where our values and behaviors are misaligned. We can 1) change our behavior (compromise coping is such an example), 2) change our values (a marvelously rare occurrence), or 3) add a reconciling rationalization. In the case of the tax problem, that can be managed by recalling that the government is asking for an unfair share to begin with and we are just restoring the appropriate balance. One of the important functions performed by professional meetings is to develop and share such rationalizations.

The payback for rationalization is that we must live in a slightly twisted and inconsistent world. That adds to pressures for coping. We even begin to imagine over time that perhaps others are doing the same thing to us and that our relationships are not fully authentic.

Physiological

A quick comparison of any ten patient records now with ten from a decade or so ago is all that is needed to recognize that America has become a nation dependent on managing the mounting demands of our lives chemically. Coffee, prescription drugs, compulsive shopping, and comfort food are near the benign end of this set of coping strategies. Alcohol, street drugs, and abusive relationships are in the same category. It may even be the case that extreme sports, fast cars, illicit sex, and other risky and dramatic activities function as “channel blockers” for coping with stress.

All forms of coping, of course, are addictive, but physiological coping is conspicuously so and more likely to interfere with other activities. The payback for the physiological variety of coping is normally heavier than for other forms, including loss of license.

Good “Coping”

All coping is self-reinforcing and cumulative. It is not self-corrective if left alone, and is normally stopped, if at all, when it spills over and impeded other areas of functioning. Perhaps most discouraging is that coping hides rather than reveals the nature of the difficulties (an imbalance between capacity and challenge) that are driving the destructive behavior in the first place. It is unfortunate that we might intervene to help an impaired fellow practitioner, but we would stand by, perhaps even applauding, a colleague...
whose practice habits invite destructive coping. America idolizes the driven individual. Early in my business education I read, but have forgotten the source for this quote: “Pity the poor overworked executive for the liability he represents to his company.”

There are, however, some established behaviors that are positive for high-pressure lifestyles. They are general in nature, prophylactic, and not destructive if engaged in over long periods of time. Moderate physical exercise, reasonable diet, laughter, and sufficient regular sleep have been repeatedly shown to help. Positive relationships, both with special individuals and with special groups, matter a great deal. So does spirituality. I am not talking about any specific organized religious practice. Research shows that people learn faster, live longer, are happier and healthier, and more effective when they believe there is a powerful force in the universe that has ultimate control and likes us.

Crash
The crash is not an extension of the degraded performance found in coping; it is a precipitous plunge in performance. Crashes often have effects extending well beyond the challenging task that cannot be managed. Crashes are not caused by failure of resources to meet a challenge; they are caused by failure of the coping mechanisms that have been artificially supporting the degraded performance. It is a foreclosure on the coping loan. On rare occasions a crash will be precipitated by a single occurrence of a vastly overwhelming trauma, such as rape or catastrophic accident. Most typically they are the result of chronic overuse of coping resulting in system fatigue. Recovery from crash entails rebuilding the foundation for effective general functioning.

Managing for High Performance
Now that we understand the factors that control high performance, we have opportunities to manage it. There are four levers: ability, effort, opportunity, and challenge. The goal is to balance these.

A careful diagnosis—covering all four areas—is a good place to start. This is not as easy as it may appear, especially for professionals who are already performing at a comparatively high level. It may not be clear whether slightly sub-par performance represents coping or boredom. This can be a troublesome tangle for those juggling many activities, because we sometimes overload one task to compensate for underachievement or boredom in another. It is likely that professionals spend much more of their lives in a strange muddle of simultaneous boredom and coping than in peak performance.

Another complicating factor is “performance shift to the right.” The performance system is dynamic and over time it drifts, even when left alone. Challenges lose the vigor and novelty they had originally, and those who gave us the challenges become less vigilant. At the same time, we acquire ability and accumulate equipment and good workflow processes. These all have the effect of displacing the high performance range. Performance does not always go up over time (it often goes up and then settles down slowly), but it almost always becomes more boring over time. The most typical form of compensation is to reduce efforts since ability and opportunity are hard to get rid of and we lose face when we negotiate down our challenges (including our titles). Professionals should guard against the traps of accumulating abilities and opportunities (new skills and new equipment and products) unless it is absolutely clear that these are already at a low level that is holding one back from taking advantage of clear existing challenges. Buying toys is an example of this self-defeating spiral. While vigorous neglect will certainly kill any project, trying to achieve high performance by sustained effort is a fool’s game. Probably the richest prospect for improving high performance lies in renegotiating our challenges. In many areas, we have complete control over the goals we set for ourselves and the only question becomes one of the relative comfort we enjoy in pursuing overly ambitious goals through a life of coping compared to more modest goals and high levels of performance.

The stress of coping and the panic of the crash are often the direct result of not having the necessary resources at hand; boredom is often a flight to hide from opportunity.
Recommended Reading

Summaries are available for the three recommended readings preceded by asterisks. Each is about eight pages long and conveys both the tone and content of the original source through extensive quotations. These summaries are designed for busy readers who want the essence of these references in fifteen minutes rather than five hours. Summaries are available from the ACD Executive Offices in Gaithersburg. A donation to the ACD Foundation of $15 is suggested for the set of summaries on generations; a donation of $50 would bring you summaries for all the 2006 leadership topics.


The nature, causes, and dynamics of stress are presented, as well as the positive and negative effects of stress on performance. Positive and negative coping strategies are also discussed.


What does it feel like to perform at peak levels?


A classic in the industrial relations field of psychology, Hackman and Oldham were among the first to propose that performance involves the fit between the person and the job. They systematically work out how changes and hiring, training, and compensation can be matched with job design to maximize productivity.


Performance is different when one pays attention to it. Sometimes the attention itself can be powerful in influencing outcomes.


Give individuals at the lowest levels in organizations more information, knowledge, power, and rewards. High-involvement management includes “emphasis on few levels in the hierarchy, seamless organizations, quick adaptation and change, lateral work relationships, and the responsibility of organizations to create meaningful and satisfactory work” (xiii). Long, but well organized and written. One gets the feeling that Lawler took great pains to make himself understandable to the intelligent lay person. Lawler is a research professor at USC’s Graduate School of Business Administration.


The definitive study of the ways goal setting affects performance. An academic text, but easy to read.


Practicing dentists and dental students display almost the same level of aptitude for digital dexterity as does the general public. Obviously, they can perform dental procedures better because of their extensive training.