7. Ethics Education

Consider where we have come in dental ethics education, especially in the dental schools. It was only in 1997 that the Commission on Dental Accreditation instituted Standards 2.20 requiring that "Graduates must be competent in the application of the principles of ethical decision making and professionalism." (Appendices E and F, Ethics Cases and Survey of Dental Ethics Educators present a picture of the state of the art in dental ethics education.) Most schools now have formal courses, about half of them include experiences in three or all four years. The standard format for ethics courses includes case work where students discuss simulated dilemmas and reflect on the application of ethical principles. There are White Coat Ceremonies and guest speakers from organized dentistry. Several textbooks have been written, some in their second or third editions. Both the American Dental Education Association and the American Student Dental Association have codes of ethics. The ADA has sponsored conferences and working groups to look into lack of academic integrity in schools and offers an annual prize for student video skits on ethics. We have the American Society for Dental Ethics; the American Society for Law, Medicine, & Ethics; the Academy of Professionalism in Health Care; the Association for Practical and Professional Ethics; the Student Professionalism and Ethics Association; the International Dental Ethics and Law Society; and special interest groups on dental ethics of the American Dental Education Association and the American Bioethics and Humanities Association. Dentists with disciplined licenses may be required to pay for remedial ethics instruction as a condition for a stay on enforcement actions. More than 100,000 dental ethics courses have been taken for credit through the American College of Dentists. Scholarships are available through the American College for Dentists for dentists seeking formal training in ethics.

Surely that is enough. There are a very few cynics who hold that one's character, including their own, is formed before college by one's family and cultural background. But the more optimistic view is that the years of dental education are the prime opportunity to influence young professionals, and the schools will be able to set beginning dentists on the right path. Certainly, it is the time when sufficient resources should be made available to train all those who have the ethical potential to be strong professionals and to gently steer those who do not into other lines of work.

This view can be called the ethics education model. The fundamental assumption is that individuals can be made as ethical as necessary when told what is expected of them and apples that have bad cores can be discovered and dealt with. Knowing what is right is both necessary and sufficient to ensure good behavior, and it can be taught.

Depending on whether one takes a small or a large perspective, the resources devoted to improving the character of dental practice will be seen as sufficient or inadequate. (The evidence in support of this generalization is also found in Appendices E and F.) The average hours of instruction on ethics in dental schools is approximately 23 over the entire curriculum. The typical dentist now works 36 hours per week, year round for an entire career. The ratio of formal to informal opportunities to learn dental ethics is too small to calculate. There are no

full-time dental ethics educators; about half who teach the topic are not dentists; four of five of the teachers report that they started to inform themselves about dental ethics *after* they agreed to be responsible for the program. The ADEA Survey of Seniors [Wanchek T, Cook BJ, Valachovic RW (2018). Annual ADEA survey of dental school seniors: 2017 graduating class. *Journal of Dental Education*, 82 (5), 524-539] reports that only the biomedical sciences are viewed by students as being more excessive in curriculum time than is ethics. Membership in professional ethics associations is small and overlapping and getting smaller. The number of hours devoted to ethics in dental schools and the number of published journal articles in the field have both been declining since about 2000. Neither dentists nor students possess knowledge of the ADA Code. (The average score on a 16-item multiple-choice test covering the code was 47%, with students doing slightly better than ADA members. See Appendix G.) Educators and students both point to the "realities" of competing practice environments as undermining ethical theory. There is no evidence that the ethical tone of the profession has been elevated since Standard 2.20 was introduce 20 years ago. The rate of disciplined licenses remains about four to six per 1,000 dentists. Some senior practitioners believe that young dental professionals are not as ethical as they were.

The point of this chapter will be to show that the effort to bend the course of dental ethics in the schools has been small and the results largely unnoticeable. The reason is that the ethics education model is faulty. This is not a counsel of despair; it is suggestion that we have been looking in the wrong place for the right answer. Dental ethics is practice, or not, and changing the conditions of practice hold promise for making more ethical dentists.

Education as Teaching and Learning

It happens all the time: we get mixed up and equate teaching with learning. We even forget that we can learn without being taught and that sometimes we can do what the teacher is talking about before the teacher arrives. Here is an easy way to keep this straight. Learning is the behavior of students; teaching is the behavior of teachers. Performance is how students demonstrate what they know; learning is change in performance.

Of the many possible definitions of learning, this one highlights the key features discussed in the chapter: learning is all the relatively permanent changes in behavior resulting from the learner's experiences.

Very few students show up in dental school knowing how to place an implant in the zygomatic arch; most both value benefiting others and know many ways to do it. Learning only occurs when there is a change in performance. Sometimes the only learning that results from a lecture on ethics is that students realize the lecturer also values doing what is right and good and has special names for that. Students may feel "lectured to." King Leopold of Belgium, famously advised his daughter that she should give serious thought to being taller.

The "relatively permanent" part of the definition is meant to insist that others can count on a general pattern of appropriate behavior, not just a one-off performance as often happens for

exams and licensure tests. But learning also leaves open the expectation that students will update their repertoire when appropriate.

Students do not learn from what their teacher does; they learn from what they experience. That is why one teacher can get different outcomes from different students. Students who sleep through class and borrow their classmate's notes learn how to pass the course. It does not matter that the student's and the teacher's goals differ. The only way to ensure that students learn what teachers know is to give students the same or comparable experiences that the teachers had. Students are very good at the process of "I experienced that Dr. X said Y, thus I know enough in the right circumstances to say that 'Dr X said Y.'" We admit students to dental school who are usually better at this skill than faculty members are at teaching. If we make the relevant performance that of being able to report or demonstrate what the teacher did, students will learn to do that. Case teaching is intended to place learners in situations where they experience reflection on competing priorities. The method is most effective when teachers remain silent. (See Appendix E for a discussion of case teaching in ethics.)

Too often we overlook the word "all" in the definition of learning. Teachers have to accept that students learn a variety of things from their (the student's) experience. In an interview with medical students who had just completed a course on medical ethics, one student reported "This was insulting. The faculty talked down to us to the point where I began to question his integrity. If our professional seniors have so little respect for us, I want nothing to do with anyone on the ethics circuit." [Glicksman E (2016). "What do I do?" Teaching tomorrow's doctors how to navigate the tough ethical questions ahead. *AAMC Reporter*, April; See also Sheehan KH, Sheehan DV, White K, Leibowitz A, Baldwin DC, Jr (1990). A pilot study of medical student "abuse": student perceptions of mistreatment and misconduct in medical school. *JAMA,* 263 (4), 533-537]. Likely there was no change in the kind of behavior the faculty member was looking for. But there was a lot of learning going on. Teachers cannot pick and choose; taking credit for the changes they like and distancing themselves for all the rest.

The ancient Greeks had three terms for what we signify by the word "know." "Techné meant "know-how" and this is the root of our term "technique": the ability to consistently produce a tangible result under the right circumstances. Much of dental education and most of dental practice is this kind of knowing. "Know-that" was a different phenomenon. The Greeks called this "episteme," from which we get the word "epistemology." Knowing that the HIV virus causes Aids, and knowing that the ADA rules about advertising fall under the principle of veracity are examples. The third kind of Greek knowledge was phronesis. We have no linguistic descendent, but it roughly means wisdom or even common-sense. This is "know-whether" or good judgment. Ethical action belongs in this category. A dentist may know that a badly decayed tooth could be extracted to make other restorations easier, know how to remove the tooth, but remain uncertain whether to perform the procedure. Perhaps the patient had not consented to or expected this treatment before being sedated. A dentist may know that the benefits carrier is likely to pay for an up-coded procedure if proper documentation can be fabricated and know how to get the necessary records. But there is still a question of whether that is the right thing to do.

Too often we make the educational mistake of confounding *knowing that* this or that is ethical without managing the necessary accompanying know-how and know-whether. It is unwise and even dangerous to assume that teaching students to know that certain behavior is unethical is the same thing as teaching them how to express that behavior and whether they should do so. It is compounding the error to further assume that hearing a wise person say they "know that" something is the case means that students will learn that something is the case in any meaningful fashion [Moberg DJ (2006). Best of intentions, worst of results: grounding ethics students in the realities of organizational content. *Academy of Management Learning & Education,* 5 (3), 307-316].

Unsupervised Learning

Most learning is "teacherless." Who taught us how to kiss, or whom to kiss? Who taught the "cappers" that there is money to be made by sending vans around in poor neighborhoods to bring in individual with Medicaid coverage for the needed 28 occlusal fillings? Who pointed out the best procedures to be billed for without having done the work? Where did organizations learn to misrepresent the benefits of legislation that would favor their economic interests?

For the most part, we just figure out what to do on our own. It is trial and error, and we keep the patterns that turn out well when matching the circumstances and the behavior. When we realize that things might not be headed in the right direction, we pull back and reflect [Schön (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books]. In fact, it is a definition of being stupid to persist in the same behavior when it produces undesirable outcomes. When things work for us, we stick with them. This is unsupervised learning. Although other people may be involved, they do not play the role of teacher: what controls and changes our behavior is how we react to the circumstances.

Change the environment and smart people learn to adapt. Some environments are such that we adapt in a positive fashion. We are invited by a friend to a society meeting and meet some fantastic people. We spend time with them and become better dentists. We have a nervous mother and a frightened child in the chair. Instead of rushing, we explain what is happening and make it possible for them to take some responsibility in a frightening situation. When done often enough, we have learned to treat patients better.

Not all environments, however, predispose learners to adopt ethical habits. The major complaint of those who teach ethics in dental schools was that the clinic was often structured to make it difficult to implement what was taught in ethics courses, and that faculty on the clinic floor failed to support or in some cases directly contradicted what was taught. Consider the (actual) case of a dental student who was taught in the ethics program that ethical dentists place the patients' interests first and was instructed in the clinic that school policy forbids making adjustments on partials unless the partial was fabricated in the school. The student learned four things: He got an A in the ethics course for saying that patients interest come first;

he got an A in clinic for following policy; he found out that is a good way to lose a patient; and he learned that outcomes in various circumstances determine how ethical one can be.

But it would be wrong to hold that unsupervised learning just happens and nobody is responsible for that. Leaders in the profession are responsible for everything students and practitioners learn about ethics, even when the learning is unintended and the leader is not present. Any situation one has control over that tends predictably to change the way others behave is the responsibility of the person in charge of the circumstances. I call these people leaders. They educate by setting up conditions that encourage ethical behavior, or not. Any individual or organization that claims credit for starting a program, adjusting incentives, involving others, or otherwise creating opportunities for success must also bear equal responsibility for creating or allowing conditions to exist, if it is within their powered to change them, where others naturally respond in dysfunctional ways. It is unethical to create practices that promote others doing bad. This is a hard rule, and one that many in positions of authority try to play only on the side that brings them credit. Individuals or organizations, including the administration in dental schools, can delegate authority for teaching, but they cannot escape responsibility for creating or allowing circumstances where their colleagues learn unethical behavior. This will be called the practice environment model of professional ethics.

Sometimes there is an antagonism between what leaders say about ethical behavior and the environments they foster or permit. In such circumstances, learners generally learn better by seeing what works than by following advice [Voronov M, Yorks L (2015). "Did you notice that?" Theorizing differences in the capacity to apprehend institutional contradictions. *Academy of Management Review*, 40 (4), 563-586; Fotaki M, Hyde P (2015). Organizational blind spots: splitting, blame and idealization in the National Health Service. *Human Relations*, 68 (3), 441-462; MacLean TL (2008). Framing and organizational misconduct: a symbolic interactionist study. *Journal of Business Ethics*, 78, 3-16; Schaubroeck JM, Hannah ST, Avolio BJ, Kozlowski SWJ, Lord RG, Treviño LK Dimotakis N, Peng AC (2012). Embedding ethical leadership within and across organizational levels. *Academy of Management Review*, 55 (5), 1053-1078; Hollensbe EC, Khazanchi S, Masterson SS (2008). How do I assess if my supervisor and organization are fair? Identifying the rules underlying entity-based justice perceptions. *Academy of Management Journal*, 51 (6), 1099-1116; Chreim S, Williams BE, Hinings GR (2007). Interlevel influences on the reconstruction of professional role identity. *Academy of Management Journal*, 50 (6), 1515-1539]. Sometimes we attempt to move responsibility for awkward ethical situations. This was discussed in Chapters 6 (Organizations as Ethical Agents) under the heading of "ethical shifting."

The necessity of unlearning

Sometimes the challenge in ethics is get professionals to stop doing the wrong sorts of things. Who shows the alcoholic how to cover up his or her habit? A dentist continues to perform endodontic procedures after he or she has lost current knowledge or adequate manual skill and despite the fact the two excellent specialists have moved into the community. A dentist shouts at staff; it is well known that there is an affair going on with one of the married patients.

Instructing the dentist to stop these behaviors is likely to meet with even less success than it would to have had a lecture from an association officer telling dental students about the code of conduct.

It is usually more difficult to get rid of undesirable ethical habits than it is to build sound ones. The reason is that we mistakenly try to punish them out of existence. The correct method is to reverse the process that works so effectively in unsupervised learning. We learn and we confirm the things experts tell us by trying them for ourselves and noting whether the results are encouraging. If we like the outcomes, we keep the behavior. If nothing happens, if something unpleasant occurs, or if it is just too much effort, we stop trying. The wisdom of unsupervised learning: make it easy to do good things and difficulty to do bad ones. We can actually combine these two methods for even faster results. Known as counterconditioning, the approach is to teach and reward positive habits that contradict undesirable ones. If referrals are satisfying, the dentists whose skill is shaky will not at the same time continue to do questionable procedures. If whistleblowers are rewarded and publicly praised, knowledge of corrosive environments will not be turned into low morale and sabotage. If a dentist advertises ethically, the chances are reduced that he or she also advertises unethically.

Punishment is not the opposite of rewarding good behavior and it does not have the opposite effect. Punishment drives bad acting underground; it usually multiplies devious behavior with a goal of covering up the unethical work. Lying, cheating, aggression designed as a distraction, and withdrawing from contact with those who can help are the typical consequences of attempting to evade punishment. Once the threat of punishment is remote the bad acting will return. Lack of transparency is a tell-tail symptom of questionable ethics. There is no evidence that increasing severity of penalties is related to reducing likelihood of unethical behavior [Dunegan KJ (1996). Fines, frames, and images: examining formulation effects on punishment decisions. *Organizational Behavior and Human Decision Processes*, 68, 58-67; Small DA, Loewenstein G (2005). The devil you know: the effect of identifiability on punitiveness. *Journal of Behavioral Decision Making*, 18, 311-318; Kahan D (2000). Gentle nudges vs. hard shoves: solving the sticky norms problem. *The University of Chicago Law Review*, 67, 607-643; Elliot A, Carlsmith JM (1963). Effect of the severity of threat on devaluation of forbidden behavior. *Journal of Abnormal and Social Psychology*, 66, 584-588].

Are Schools Responsible for the Ethics of the Profession?

Over a period of several months in 1991, in a small hospital in England, four children died and nine were seriously injured on a single ward. An investigation eventually revealed that a nurse, Beverly Allitt, had been giving injections of insulin and other drugs that caused the harm. The hospital had been suspicious that something was amiss, but the connection and conviction were made by police. A national inquiry was called and almost two years of deliberations were consumed in fixing the blame. Nurse Allitt was sentenced to prison. The hospital was exonerated because it had policies of high standards in place and because so many government regulations had been imposed on hospitals that they could not follow through everywhere. The physicians who treated the patients were similarly excused because they had extended

professional courtesy in assuming the integrity of their colleagues or those who worked for them. Eventually the blame was fix principally on a part-time nursing program Ms. Allitt had attended years previously. A note was found in her file stating that she had exhibited unusual behavior and in particular had not accepted offered help. It is natural to want to move garbage away from one's front porch. It is not always helpful, however, to place it where it probably made no difference and rather remote from those most directly responsible. (See [Chambers DW (2017). Shifting the blame. *CDA Journal,* 45 (8), 389]).

Closer to home are the papers of Maxine Papadakis, widely read in the early 2000s showing a connection between questionable conduct while in medical training and eventual disciplinary actions by state medical boards [Papadakis MA, Hodgson CS, Teherani A, Kohatsu ND (2004). Unprofessional behavior in medical school is associated with subsequent disciplinary action by a state medical board. *Academic Medicine*, 79 (3), 24-249; Papadakis MA, Teherani A, Banach MA, Knettler TR, Rattner SL, Stern DT, Veloski JJ, Hodgson CS. (2005). Disciplinary action by medical boards and prior behavior in medical school. *New England Journal of Medicine*, 353, 2673-2682; Papadakis MA, Arnold GK, Blank LL, Holmboe ES, Lipner RS (2008). Performance during internal medicine residency training and subsequent disciplinary action by state licensing boards. *Annals of Internal Medicine*, 148 (11), 869-876]. Some argued that this research demonstrated a failure on the part of schools to teach ethics or to identify and screen out those who were known or could have been known to be future bad actors. The data do not lie, but they do not tell the whole story either. Documentation of school behavior was drawn from the files and included nervousness on the admissions interview, talking back to faculty, needing reminders, and few cases of illegal or unethical actions involving patients. The research is suggestive, but did not really answer the right question. It was not reported what percentage of physicians with negative notes in their files have been practicing without disciplined licenses or how many who have been disciplined raised no concerns while in school. The percentage of greater interest is the proportion of practicing physicians who are unethical who have not had their licenses disciplined. That number is unknown. (See [Chambers DW (2016). Are physicians really that unethical? *CDA Journal,* 44 (4), 213]). See Appendix D: Disciplined Licenses.)

In both of these cases it was assumed that bad acting was a personality trait of the individual and not the circumstances in which the individual practiced. Allitt had practiced for many years before her horrendous behavior and physicians in the Papadakis studies were on average in their mid-50s when disciplined. Yet, in both cases, there was an attempt to reach back and say that schools should have said something that would override faulty character. At the least, they should have detected problems and barred suspicious people from becoming professionals. Dental school in the United States do in fact do this at the rate of about 2% or 3% per years [ref]. State dental boards also have this responsibility.

Ethics Within the Academic Community

We know very little for certain about how ethical practicing professional are. The definition of "unethical" is open to wide interpretation and professions are reluctant to get too specific about these things. (See Appendix B: Justifiable Criticism). An exception is self-reported

cheating behavior among students in professional programs. This was a hot topic among researchers a decade or so ago [Cizek GJ (1999). *Cheating on tests: How to do it, detect it, and prevent it.* Mahwah, NJ: Lawrence Erlbaum; McCabe D (2001). Cheating: why students do it and how we can help them stop. *American Educator,* Winter 1-7; McCabe DL (2005). It takes a village: academic dishonesty & educational opportunity. *Liberal Education*, Summer/Fall, 26-31; McCabe DL, Butterfield KD, Treviño LK (2006). Academic dishonesty in graduate programs: prevalence, causes, and proposed action. *Academy of Management Learning & Education*, 5 (3), 294-305; Puka B (2005). Student cheating. *Liberal Education*, Summer/Fall, 32-35; Treviño LK, Victor B (1992). Peer reporting of unethical behavior: a social context perspective. *Academy of Management Journal*, 35 (1), 38-64]. The customary approach to studying this phenomenon is to ask students anonymously whether they have ever cheated on a test. Typically, between 70% and 80% say they have. This kind of project has been carried out in dentistry as well, with similar results [Andrews KG, Smith LA, Henzi D, Demps E (2007). Faculty and student perceptions of academic integrity at U.S. and Canadian dental schools. *Journal of Dental Education,* 71 (8), 1027-1039; Beemsterboer PL, Odom JG, Pate TD, Haden NK (2000). Issues of academic integrity in U.S. dental schools. *Journal of Dental Education*, 64 (12), 833-838; Graham BS, Knight GW, Graham l (2016). Dental student academic integrity in U.S. dental schools: current status and recommendations for enhancement. *Journal of Dental* Education, 80 (1), 5-13; Nath C, Schmidt R, Gunnel E (2006). Perceptions of professionalism vary most with educational rank an age. *Journal of Dental Education*, 70 (8), 825-834]. The high-water mark for reported cheating was in 1979 at over 90% [Fuller JL, Killip DE (1979). Do dental students cheat? *Journal of Dental Education*, 43 (13), 666-669].

Among dental students, cheating on examinations is about ten times as likely to be the cause of a disciplinary action as is any transgression involving a patient, such as forging a faculty signature [Graham BS, Knight GW, Graham L (2016). Dental student academic integrity in U.S. dental schools: current status and recommendations for enhancement. *Journal of Dental* Education, 80 (1), 5-13]. Fortunately, practicing dentists take very few examinations. Cheating in dental schools is similar to the rate in other professions, despite the fact that more than 90% of dental programs have honor codes and orientation lectures on academic integrity for students. Those students who are most apt to cheat are at the top of their class and interested in getting into graduate programs; the justification most often cited is “others are doing it”; and the strongest deterrent is perceived likelihood of being detected. It is often done simply because it is frustrating not to be able to look good [Chambers DW (2007). A primer on dental ethics, Part II: Moral behavior. *Journal of the American College of Dentists*, 74 (4), 38-51]. Chambers also reports that the reasons students fail to report incidents of suspected cheating by their classmates is the expectation that no action will be taken by the administration. The reason most often given for faculty failure to report cheating is wanting to manage the matter personally. Faculty seem to avoid the uncertainty of outcomes if others become involved and prefer the certainty of knowing that students cheat without having to prove it.

In their classic study of boys cheating over an extended period of time, Hugh Hartshorne and Mark May [Hartshorne H, May MA (1928). *Studies in deceit*. New York, NY: Macmillan] found that 90% were dishonest, but they were inconsistently dishonest. One who steals the teacher’s

pencil might be repulsed at the thought of swiping a classmate's lunch. What was considered unacceptable varied from day to day and situation to situation. The work of Hartshorne and May has been widely interpreted to mean that there is little evidence dishonesty is a character trait and good reason to consider it to be situationally determined and idiosyncratically defined. This is part of the reason why it is so difficult to make any headway managing ethics with generalizations or for one person to talk another into doing things the way the "expert" thinks everyone should do them.

It is not an easy matter to interpret the evidence on academic integrity in dental schools. Certainly it is not the case that 70% of graduates from dental schools (or larger numbers in previous years) have a flawed characters and schools have been lax in not correcting this or weeding out the seven-in-ten who should not have been allowed into the profession at all. It is probably just plain wrong to divide the world into ethical and unethical folks. Criminologists have amassed a large amount of data showing that we all admit to being unethical . . . sometimes and in some circumstances . . . and we can justify it. Generally, the numbers who fess up are in the 90% range in the general public [Gabor T (1994). *Everybody Does It! Crime by the Public.* Toronto, ON: University of Toronto Press; Silberman CE (1978). *Criminal violence, criminal justice*. New York, NY: Vintage; Patterson J, Kim P (1991). *The day America told the truth: What people really believe about everything that really matters*. New York, NY: Prentice Hall]. One study of the American public put self-admitted lawbreaking such as malicious mischief, disorderly conduct, and larceny all over 80% and tax evasion at 50% [Wallerstein JS, Wyle CJ (1947). Our law-abiding law breakers. *Probation*, 25, 107-112]. About two-thirds of garages charge for auto repairs they do not perform [Riis RW (1941). The watch repair man will gyp you if you don't watch out. *Reader's Digest*, 39, 10-12] and fraud against the government in the American healthcare system is estimated to be between 10% and 20% [Siegal LJ (1992). *Criminality* (4th ed). St Paul, MN: West Publishing]. There is evidence that students anonymously over self-report questionable behavior such as plagiarism and drinking in order to give themselves an excuse in case they need it [Prentice DA, Miller DT (1993). Pluralistic ignorance and alcohol use on campus: some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64, 243-256].

There is a natural response to the "everybody does it, and dental students are actually not so bad" argument in the preceding paragraph. Some would say "Any amount of cheating or other form of dishonesty in a profession is too much, and we might as well begin with the schools and fix this problem instead of offering excuses about what others say they do." Although often well-intended, this is mostly a piece of hollow rhetoric. The true question is "isn't any inaction on the part of the *profession* for cleaning up this problem an evasion of responsibility, and isn't offering platitudes, blame, courses, and codes as symbolic gestures just a way making one's self look good by pointing out how bad others are?" If the profession wanted to decrease the lack of integrity reported in dental schools, it certain could, but not by finger wagging. Emile Durkheim [(1965). *The rules of sociological methods*. SA Solovay, JM Mueller, trans, GEG Catlin ed. New York, NY: Free Press], the founder of the field of sociology, noted that we are especially keen to find dirt on others, as that makes it easier to forgive our own small transgressions.

Student Professionalism and Ethics Association

SPEA deserves its own section in this chapter. First, it is by far the largest dental ethics organization, with several times more members than all other dental ethics groups combined. But more to the point, it is the only group that defines its responsibility to include all those participating in the project. (Membership in the ADA is only 65%.) The Student Professionalism and Ethics Association is a national, student-driven association that was established to promote and support students' lifelong commitment to ethical behavior in order to benefit the patients they serve and to further the dental profession.

The objectives of the association are: to act as a support system for students in strengthening their personal and professional ethics values by: (a) providing a resource for ethics education and professional development, (b) fostering a non-punitive, open-forum environment for ethics communication, (c) promoting awareness of ethics standards and related issues within dentistry, and (d) collaborating with leadership of the dental profession to effectively advocate for its members. Note the emphasis on inclusiveness, communication, and creating a positive environment.

The founding of SPEA at the USC dental school in 2007 is a story that must be told repeatedly. A group of students met with Dr. Al Rosenblum, a faculty member known for his concern over ethical matters. The students described several practices they felt were unethical. Dr. Rosenblum listened sympathetically and promised to take care of these matters with the faculty and administration. The students said, "No, we appreciate everything that others are doing, but we want this to be a student concern. At some level, this is our issue, and unless we are involved in making the needed changes, we lose an important element of responsibility." There is a famous teaching case used in business schools, known as the Hovey-Beard Case that is relevant here (https://www.chegg.com/homework-help/part-1the-hovey-beard-company-manufactured-variety-wooden-to-chapter-6-problem-1cq-solution-9780078029462-exc). The case, is based on an actual incident where employees of a toy manufacture and painting company created their own standards that substantially improved morale and productivity. But these work standards were rejected and employees were fired because the solution did not come from management. [Chambers DW (2007). The Hovey-Beard effect. *Journal of the American College of Dentists,* 74 (3), 2-3]. Dentists coming into schools to explain what they expect of new graduates may not be as useful to students are that is to the guest speakers.

There are now SPEA chapters at about 80% of U. S. Dental schools, and SPEA has a place at the table with the American College of Dentists Board of Regents.

One-shot, Commercial Initial Licensure

William Gies devoted an entire chapter to state dental boards in his report. Much of the material was historical, tracing the need for protection of the public as dentistry freed itself from a being a trade and became a profession. He was frank in calling boards to work with others to set high standards and a bit harsh on them for the way they conducted patient-based

exams, he called for national licensure, and he focused his attention on the schools as the ultimate arbiters of competency to practice. In the closing section of his chapter on the boards, headed "Important opportunities open to the National Association of Dental Examiners to effect improvements," he stated: "With the rapid elimination of commercialism from dental education, and the impending extinction of unacceptable dental schools, the prevailing statutory requirement of reputability has lost its original practical importance, for all of the schools will soon be reputable" [Gies WJ (1926). Dental education in the United States and Canada: A report of the Carnegie Foundation for the Advancement of Teaching. New York, NY: The Foundation. p. 69].

That what 1926, and now most of the boards are out of the testing business. It was recognized that they could not provide a cost-effective, valid assessment of dental school graduates' readiness to practice. That responsibility had to be delegated, just as boards delegate complaint investigation to a department in state government such as Consumer Affairs or verification of continuing education attendance to various commercial interests. Boards faced a choice between independence and validity. Schools could provide valid evidence for competency and fitness to practice based on standards of character, knowledge, and performance on patients in multiple, comprehensive clinical tests over many disciplines. But Gies thought 90 years ago that some independence would be necessary until all the proprietary schools were gone. Third-party, commercial testing agencies would be independent as would a national testing system that ensured universal licensure, but could they demonstrate validity? Boards opted for commercial testing agencies because they were more impressed by their claims of validity than by the schools' reputations for independence of commercial interests.

There are fair arguments to be made about independence and commercial interests, especially concerning the connections between some members of boards and commercial testing agencies. Two other ethical argument have been made recently against the way initial licensure is managed. The use of patients in a one-off encounter raises the issue of who has responsibility for the patient's follow-up care, especially if untoward events should occur. Schools accept this responsibility for their students while they are enrolled: commercial testing agencies do not accept this ethical responsibility when testing candidates. They pass the burden back to schools or to candidates. Another ethical concern is the temptation for candidates to alter the natural treatment sequence of their clinical patients so that the "right kind of lesion" is present on testing days. The third frequently voiced ethical concern is the brokering of board patients. It is understood that patient selection is critical to board success (but discouraged in the ADA Code of Professional Conduct, 4.A). "Ideal" board patients can command large fees, and this fact has created a market for individuals who broker such patients. Commercial testing agencies deny ethical responsibility for any of these ethical issues. This is known in ethical theory is "moral distress." The notion is to pass ethical responsibility to an individual who must make a choice between bending the rules or performing at a disadvantage because they lack the power to create a more equitable and just framing of the ethical issue. As explained in Chapter 6 on organizational ethics, individuals and organizations with good lawyers can legally escape the kinds of ethical burdens they shift to others, but they cannot escape the moral responsibility.

Another ethical issue associated with one-shot initial licensure examinations is lack of demonstrated validity. Commercial testing agencies say they have evidence of reliability and validity, but this usually is not made public to the standards expected of peer reviewed publishable research. It is said examiners will agree with each other when they look at a single procedure complete by a candidate on a particular patient. That is one form of reliability, but not the kind that is needed [Chambers, D. W. Portfolios for determining initial licensure competency. *Journal of the American Dental Association*, 2004, *135* (2), 173-184]. We need to know if a candidate can perform competently across multiple patients in the various disciplines and skills needed to begin practice. In one naturally occurring experiment where candidates took two boards within a single month, the correlation between scores for periodontal performance shows no reliability – in fact the correlation was negative [Chambers, D. W. Board-to-board consistency in initial dental licensure examinations. *Journal of Dental Education,* 2011, 75 (10), 1310-1315].

Validity is the issue of whether the information generated by a test supports a decision that is appropriate (competency to practice across all skills expected of a dentist). Commercial testing agencies usually say they meet this standard because the procedures tested are procedures that general dentists are expected to perform. That is the wrong question: one should ask whether all the procedures that a dentist performs, including comprehensive care and case management, are tested on one-shot initial licensure examinations? Psychometrically, it is virtually impossible to measure validity on tests where the pass rate is nearly 100% as it is for candidates facing the current examination protocol. Of course one-shot initial licensure examinations do not always protect the public. Every year, dentists have their licenses suspended or revoked who have passed one-shot initial licensure examinations by commercial testing agencies. The ethical issues of using a test with extremely low reliability and unknown validity are of equal gravity to those involved with patient involvement with boards.

A written test, even on in the OSCE format, by definition has limited validity. Only evaluation across the full range of knowledge, skills, and professionalism with repeated measures on actual patients participating in comprehensive care should be accepted as evidence for entry into the dental profession. Several states are following California's lead in using a portfolio approach. The choice between independence and validity needs to be rethought.

Conclusion

Dental schools play an important role in influencing the ethical habits of students. But it is only for four years, or a few more counting residency or specialty training. Most of the effect on ethics is due to the culture of dental education, the unsupervised learning that comes from experimenting and discovering which ways of behaving work best and how much latitude one is given when ethical norms seem inconvenient. Of course, while in schools there will be situations where people tell students what they ought to do. But the hours devoted to this sort of thing are very small, and often the advice comes from non-dentists or dentists who are not part of the school culture. On the whole, a strong case can be made that dental students learn

to be ethical students and professionals under supervised conditions. When they graduate, almost every one of them looks and acts and shares the same values as do other beginning dentists.

The preceding paragraph describes the ethics education model. There are some who would like to see it extended to penetrate the entire profession. This is the realm of the educator. The assumption is that everyone can be taught to be ethical, generally by being told what to do. The view developed in this chapter is different. It is a practice environment model of professional ethics. Dentists will become as ethical as their peers and others expect them to be and as the conditions of dental practice allow. This is the realm of the leader. They make the profession ethical by changing the way it is practiced, and that changes the way dentists act.

Dentists continue their, largely unsupervised, learning in practice for the rest of their careers. They build into their professional lives the habits and values of their colleagues. Some excel in ways that are exemplary; others drift into ethical misconduct. But the deviations are only as large as the profession permits or the public will accept. Dentistry is practiced in settings that are very unusual in affording great personal independence and power over those one deals with regularly. The profession could exert much greater influence on the ethical habits of its members if it were organized in a more interactive fashion. Some of these changes are coming about because of what is happening in the environment in which dentistry is practiced.

The profession would probably not benefit from imitating the brief lectures and hypothetical dilemma instructional format now used in the schools as a way of teaching ethics. Leadership in the profession in arranging practice conditions that make it easy for dentists to do the right thing seem to offer more. And to the extent that ethics can be based on positive interactions rather than punishment or name calling, it will continue to grow.