

# Editorial

## Education—who's responsible?

The incredible proliferation of new dental materials and techniques in all facets of the dental profession poses a huge problem. As materials' development accelerates beyond the capacity of the educational system to stay abreast, who teaches the practitioner? And even more importantly, who teaches the teacher?

In years past, new developments took time. The operative preparation techniques of G. V. Black are still the norm for one material that has been used in restorative dentistry for 150 years, dental amalgam. In operative dentistry, the advent of the acid-etch technique has wrought an explosive change not only in materials and their applications, but also in new preparation techniques for these materials. In orthodontics and endodontics, we have seen major advances in technology, many of which relate to the same acid-etch technique and the new bonding resins and alloys.

What about lasers? Do they presently have the broad application some manufacturers would have us believe or is the dentist shelling out \$40,000 simply for the title of most high-tech dentist on the block? In oral surgery, periodontics, and prosthodontics, the advent of successful studies into implants has opened up a whole new era of dental treatment that is entirely foreign even to very recent dental graduates. In the past two decades, pediatric and preventive dentistry have welcomed techniques that can eliminate dental caries, with the appropriate combination of fluoride and sealant. Researchers in periodontics are making great strides toward the elimination of periodontal disease. Discoveries marrying glass-ionomer cement technology and light-cured resins promise further wonders in restorative dentistry.

So to whom do graduates of dental schools turn when it comes time to adopt a new technique or material? Unfortunately the person who in many cases ends up doing the teaching not only is not qualified to teach, but also has a vested interest in teaching from a commercial, rather than a scientific, approach. Although manufacturer-sponsored courses from ethical companies are frequently necessary and excellent ways to disseminate information, some companies allow commercial interests to overwhelm the educational pretext. While there is nothing wrong, in my

opinion, with an overtly commercial presentation, it must be so identified without ambiguity or deceit.

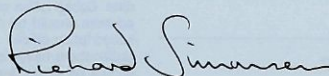
Where are the real teachers, the university faculty? Undoubtedly, in some cases, they are still teaching the techniques of the past to dental students. Unfortunately, students have little chance of assessing whether the education they receive is up to date until they have passed into the world of dental practice. The tragedy is that the real teachers are not teaching new techniques because they are themselves not versed in the new materials and techniques. While their skills and confidence level in teaching something new remain undeveloped, the need for manufacturer-sponsored courses for dentists, and the potential for commercial abuse, will continue. But it need not be this way.

What is needed is more cooperation between dental industry and the universities. What better way to spread knowledge than to ensure that the teachers are taught first? While some dental educators are not comfortable learning from sales representatives or company scientists, teachers must accept that knowledge of material development is best learned from the developers themselves. The alternative is for these representatives to go directly to the dental graduates in a commercial setting—then the information will lack credibility as well as the educational expertise and specialized facilities of the university faculty.

Dental school teachers and dental industry should form educational alliances. Cooperation will benefit all, especially graduated dentists and undergraduate dental students, and thus, by extension, the public.

So whose responsibility is education? The responsibility for updated postgraduate education courses lies with the dental schools. But manufacturers of new materials requiring new techniques can provide immeasurable assistance to the universities. Educational cooperation is the responsibility of both manufacturers and dental school faculty.

The teachers must first learn, then teach.



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