

*W*e know that dental schools and residency programs are always looking for ways to improve the quality of dental education and dental care. But this is only one side of the equation. They must also be continuously careful when it comes to incorporating new technologies that bring with them unjustifiable expense.

*H*ere's the good news. Dentistry is at the beginning of a profound paradigm shift that is dramatically changing the way we diagnose, treatment plan and deliver dental care. We would love to come and tell you about it.

*O*ur offer is simply this. We (Steve Schmitt and Ben Young) will come to any dental school or AEGD program in the country at our expense to speak on the subject -

The Digital Transformation of Dentistry

*F*urthermore, all support services we offer, that directly benefit dental education and dental resident patient care are at half our usual fees.

*S*o if you are looking for an interesting program to enlighten, energize and inspire the faculty and students in a particular department or the entire school; or if you are seeking solutions for the challenges mentioned above, please give us a call.

(More Information on the Back)



VOXELOGIX™

Virtual Solutions Made Simple™

Stephen M. Schmitt DDS, MS and Benjamin W. Young DDS, MS

One is a boarded prosthodontist and the other a boarded periodontist. Both are seasoned dental educators and clinical innovators. Their vision is to transform dentistry by training and supporting dentists seeking to harness the power of digital imaging, modeling and manufacturing. The company, Voxelogix, because it is the outgrowth of their work as dentists, is designed to support dentists in ways that make complex patient care easier and more productive. Also they think the digital world should conform to dentists as clinicians and not force them to be computer programmers in their spare time.

Most dentists already know that Cone Beam Computer Tomography (CBCT) is a wonderful adjunct to current diagnostic practices. What is less understood and appreciated is the fact that it provides a powerful three-dimensional patient data set that can be the basis for CAD/CAM designs and high speed manufacturing processes.

This means it is now possible to bypass many old, slow, less-accurate artisan dental laboratory steps dentists and technicians have routinely performed their entire careers.

Here are a few Voxelogix of the benefits to schools, educators, as well as graduate and undergraduate students:

- Replacing large gold castings with milled titanium improves precision (fit-tolerances less than 15 micron regardless the size of the piece).
- Replacing large gold castings with milled titanium lowers material cost (over \$1,000 for one ounce of gold versus about \$8.00 for one ounce of titanium).
- Precision milling by computers and machines lowers labor cost. This results in designs that cannot be made by hand, let alone made rapidly one after another.
- Remaking any device is as simple as reprinting a document. Just modify the computer model and re-mill (perfect for a dental school environment).
- Because machines do not require vacations or overtime pay cost of labor is lowered.
- Because laboratory technician are able to handle greater work loads with less stress, their performance and moral lift.
- Improving implant surgical outcomes lead to better restorative outcomes.
- More predictable treatment outcomes with lower treatment risks result in less treatment time per appointment and fewer number of appointments required for complex care delivery.
- Reduced reliance on any particular implant company or system adds more competition to the market place which increases innovation and lowers cost.

In 2009 Drs. Schmitt and Young introduced the procedure called NeXsmile™ to the AEGD program at the University of Oklahoma University School of Dentistry. Following their one-day seminar (similar to one they would give for school or department) they later returned to support a live-patient demonstration of the NeXsmile™ procedure. A portion of the patient's care funded the cost of their trip. Because this procedure simplifies and shortens the number of appointments necessary to restore the full-arch implant case, they were able to demonstrate that recent dental graduates can participate in managing the care of these complex cases. This provided a real confidence buster for these residents. In addition, NeXsmile™ is becoming a wonderful platform for helping this AEGD program refine resident skills in the areas like esthetic design, transitional denture management, and implant reconstruction. It also lowered the residents' after-hour dental laboratory time setting denture teeth and making surgical guides because these tasks were being managed by machinery.

People familiar with what we are doing: Charles Goodacre, Dean, Loma Linda School of Denistry; Ken Kalkwarf, Dean, UTHSCSA; Bill Butler, Dental CE, UTHSCSA; Periodontics Department, UTHSCSA, Prosthodontics Department UTHSCSA, David Buxton and Stephen Reagan, OKU, AEGD Program; Gil Triplett, OMFS, Baylor; Bill Robbins, Jack Shirley, Roger Macias, David Little all lecturing clinicians from San Antonio, Texas.

Contact Information

Steve Schmitt – 210-887-3042, steve@voxelogix.com Ben Young – 210-415-4077, ben@voxelogix.com

