

Lucas Shapiro, DDS:

3D Printing Isn't Smart; It's a No-Brainer



Appreciating the Advantages of 3D Scanning and Printing

Having completed his post-doctoral orthodontic training less than three years ago, Dr. Lucas Shapiro has never worked in a practice that didn't have 3D scanning and printing capabilities. But while he never had to deal with the time-consuming, messy, and imprecise process of mixing and pouring plaster and having to coordinate manufacturing and logistics with a dental lab, stories from his more experienced colleagues have helped him develop a deep appreciation for the advantages of these intertwined digital technologies.

Invested in Innovation

The practice where Dr. Shapiro works has always embraced state-of-the-art technology, primarily due to the extremely competitive nature of the New York City market. Patients want and expect the best possible service, he says, and if your practice doesn't provide it, there are literally hundreds of practices that will. As a result, years ago the practice became one of the first to invest in 3D scanning and printing. While that investment at the time might have seemed somewhat daring, today it is virtually essential.

Picking the Right Products

According to Dr. Shapiro, the practice's first printer was roughly four times the size of the DMG 3Demax printer the practice currently uses. A compact form factor wasn't the only reason for purchasing the 3Demax. The practice was also attracted to the LuxaPrint resins for splints, bleaching trays and gingiva that DMG makes for use with the 3Demax. Dr. Shapiro is also a big fan of the Company's Icon infiltrant, which he uses with many of his patients to treat their white spots following the removal of their braces. He said patients love being able to make their white spots go away without having to have their teeth drilled or deal with the time and expense of veneers.

Same-day printing of appliances with the 3Demax and removing white spots with Icon are similar in that patients might not know there's an option until they experience them firsthand, and then they love them!

5 Dimensions of 3D Printing















3D Printing for Power and Peace of Mind

For Dr. Shapiro and his colleagues, the combination of 3D scanning and printing gives the practice much more power and control than is the case with the conventional approach to manufacturing appliances. This advanced in-house technology means you are no longer at the mercy of the lab's scheduling priorities, miscommunications with the lab, mishaps with shipping. It also means the precision of the finished appliance won't be compromised by air bubbles, ripped impression material, or other problems resulting from human error. In addition, if the patient ever damages or loses their appliance, you have the peace of mind of knowing that it's "in the cloud" and can be quickly and easily reprinted. And if that patient is away at college or for some other reason far from the practice, it can be printed and overnighted.

Just as people love watching donuts being made in a bakery, our patients love seeing appliances being printed in our practice.

A Wonderful Way to Wow Patients

Dr. Shapiro might be the first person to draw a parallel between donut shops and dental practices, but he makes an interesting point. Anything that makes "going to the dentist" more fun has to be a good thing. To that end, Dr. Shapiro's practice on occasion uses its 3Demax to print everything from pen holders to figurines. More importantly, impressing patients with state-of-the-art technology reinforces the image of the practice as one that has the best tools, the best techniques, and the best patient care.



If we didn't have a 3D scanner and printer, we wouldn't be in business.



A Priceless Asset

Since Dr. Shapiro was still in high school at the time his practice first embraced 3D printing, it's hard to quantify the impact of investing in this technology. But in his mind, such a calculation would be purely academic. As he sees it, no financial statistic is needed to justify investing in a technology that brings so many benefits to a practice, its team or its patients.



DR. LUCAS SHAPIRO is an orthodontist with Lemchen | Salzer Orthodontics in Manhattan. He is a graduate of Washington University in St. Louis and Stony Brook University School of Dental Medicine. He completed his post-doctoral orthodontic training at Tufts University School of Dental Medicine.

Dr. Shapiro is very involved with social media and dental content creation. He started the Instagram page @futuredentists, works with the educational organization @ignitedds, and has an orthodontic tiktok page @drshap.

