Tools of the trade

By Dr Les Kalman, Canada

As I think back to my younger days, I used to love to take things apart and try to put them back together. That progressed into a hobby as a bike mechanic. Cable replacement, greasing the bearings, wheel truing— I loved it all, I had minimal tools, but I had the know-how of how to get the job done. When I got my dream job as a shop mechanic, I was amazed that there was actually a proper tool for every job. The wrenches and ratchets were literally the tools of the trade.

It occurred to me, the mechanic needed to understand what the tools were for, how to use them and especially how to care for them. I realised and appreciated the importance of the tools, but did not want them to be the limiting factor.

Dentistry is experiencing a truly remarkable period with many ‘tools’ of digital dentistry available to the clinician and technician. These tools are not only providing increased accuracy and improved efficiency, but are also improving the experience for the patient, clinician and technician.

Communication has also been expanded with digital dentistry, allowing for easier translation of information to the patient, the insurance company, colleagues and the laboratory. With an open-source approach, the technologies have the opportunity to be merged and shared. Add in the advances in mobile technology, the portability and the utilisation of technology becomes even more appealing. From an academic and research perspective, I can attest that I am truly a tech junkie. I love gadgets. Technology seems to improve every aspect of my day. I find the technological solution to a problem a unique driving force that harnesses limitless passion. It appears to be an exciting time!

The spectrum of digital dentistry has become quite overwhelming. There are technologies that provide numerous approaches for image acquisition, easy-to-use design packages, milling/printing solutions, implant stability assessment and even real-time guided implant surgery. The technologies seem to represent every aspect of diagnoses, treatment planning and treatment delivery. It appears to be a very exciting time!

But let’s not let the excitement overwhelm us. In dentistry, we have the privilege of improving the oral health of our patients. There can be little comparison to a bike mechanic, as the human body presents a unique set of complex systems.

However, the technologies in digital dentistry represent tools. These tools have a purpose and we must be able to understand what the tools are for and how to use them. The tools cannot act as substitutes to fundamental principals. As clinicians and technicians, we must rely on our knowledge, skills and evidence-based experience to act as our guide. From the subjective aspect of patient informed consent, to the rigorous protocols of implant surgery, let us exercise what our comprehensive training has taught us. The tools are merely there to assist us on our mission.

As we, clinicians, technicians, educators and researchers, look to advance dentistry in a modern technological world, let’s keep the digital dentistry toolbox open to more tools. Let’s always pose the question ‘why’ and try to find a solution to ongoing problems. Let us keep the aspect of accessibility in mind, with the development of open-source and affordable technologies. Lastly, let us merge our knowledge, skills and experience with the tools of digital dentistry to propel our profession as leaders in healthcare simulation.

Dr Les Kalman is an assistant professor at the Division of Restorative Dentistry and Chair of The Dental Outreach and Community Service programme at the Schulich School of Medicine and Dentistry at Western University in London, Canada. He can be contacted at lkalan@uwo.ca.

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