Florida's Outlook On the Dental Laboratory Profession
3rd Quarter 2014
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United We Stand

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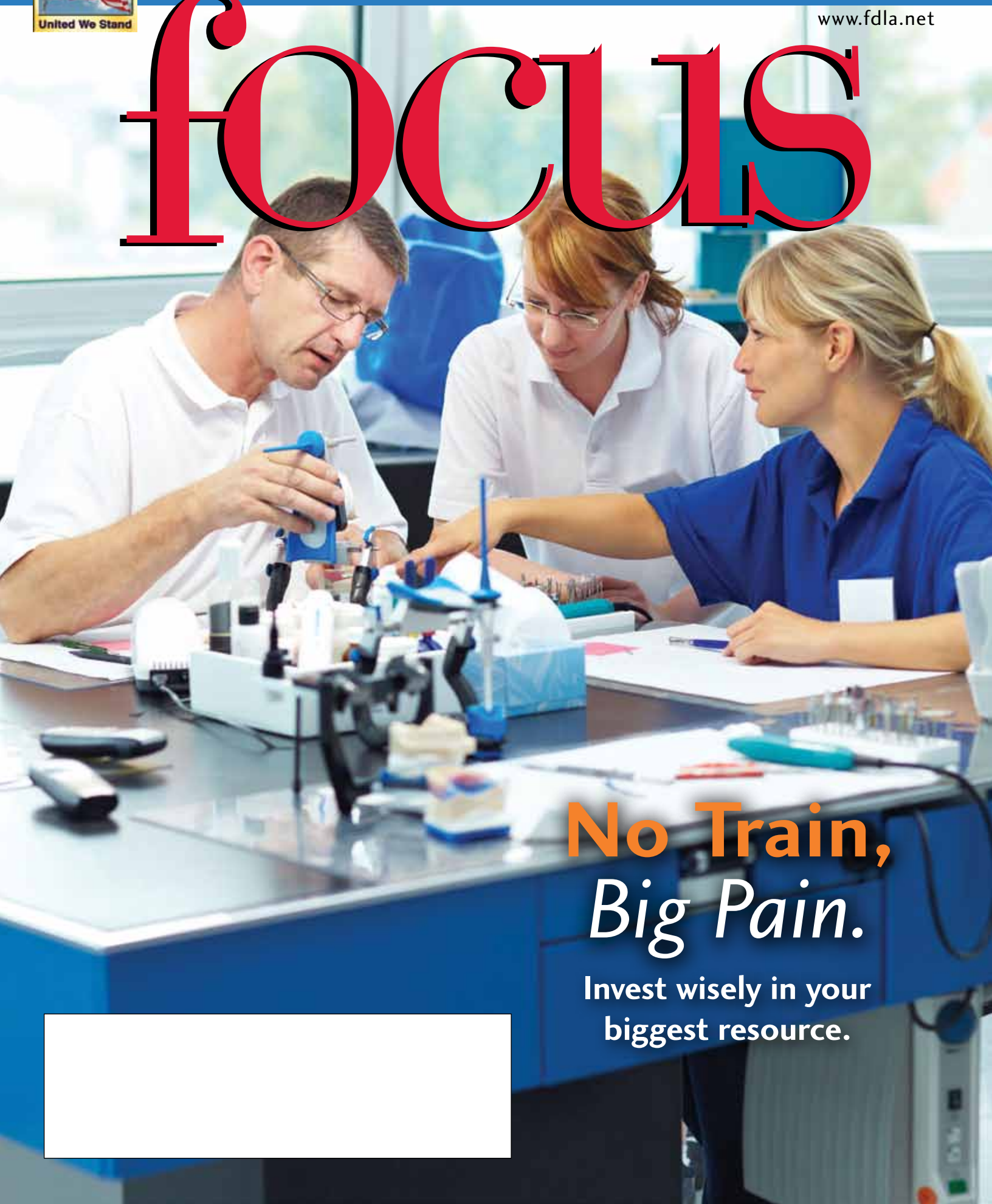

No Train, *Big Pain.*

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Standing Together

For those of you who attended the 50th Anniversary Southern States Symposium & Expo, thank you. I hope you enjoyed it as much as I did. This coming year, we need to stand together and support our profession and it is crucial that we support the Florida Dental Laboratory Association.

We all need to remember how very important it is to pass on your skills and insights to others. My sister, Barbara, and I are here today as a direct result of our father's talent and passion for our industry, which he shared with us every day. We know that dental technicians are the unsung heroes that have changed people's lives with our talents. I am honored and proud to be a part of such a passionate profession. The talents that each of you possess, whether in the fixed, removables or in the management end, are reasons to be proud.

"We know that dental technicians are the unsung heroes that have changed people's lives with our talents."

The Foundation for Dental Laboratory Technology, which NADL helped found, was brought up several times during the Southern States Symposium & Expo. There have been numerous technology schools over the past several years that have closed. It is getting harder to find a school or the finances to attend even if you are fortunate enough to be located near a program. The Foundation's purpose is to help those who want education or to further themselves in the dental technology field. If you ever have the chance or opportunity to support them it goes a long way. Again, we need to stand together and appreciate each other.

I hope that this year is very prosperous for you, your families and your businesses. May your health be good and your lives full. If you have any thoughts, suggestions or concerns relative to the association, please get in contact with your FDLA board. We are here for you.

We are working on next year's symposium. If there is meeting content, exhibitors or specific speakers you are interested in, please get in touch with someone on your board so we can put that in place.

Thank you for giving me the honor of being your FDLA president.

By Kristen Brown
FDLA president

FDLA Mission

Serving Florida's dental technology professionals as a valued part of the dental team enhancing oral health care.

FDLA Vision

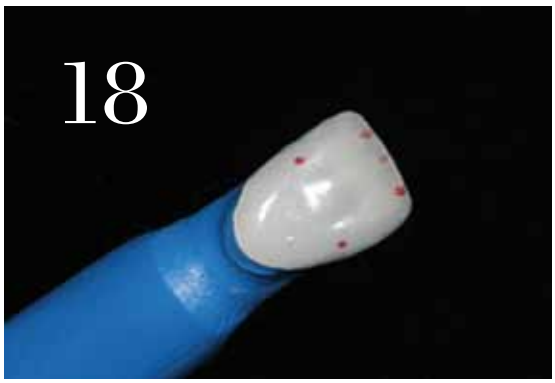
Advancing the individual and collective success of Florida's dental technology professionals in a changing environment.

Values Statement

FDLA's board of directors and professional staff are guided by these principles:

- Integrity
- Leadership
- Recognition
- Safety
- Acceptance
- Innovation

Contents



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Southern States Symposium & Expo a Success

Hundreds of FDLA members took the mystery out of the future at the 2014 Southern States Symposium & Expo held May 8 - 10 at the Renaissance Orlando at SeaWorld. The Southern States Symposium & Expo, presented by FDLA, is the largest dental laboratory industry meeting in the country run by a nonprofit association. This year marked the Florida Dental Laboratory Association's 50th anniversary and the meeting celebrated the very people who make this association so successful - you.

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CDTs celebrate milestones.

CDTs celebrate milestones.

CDTs celebrate milestones.

Exchanging the president's gavel.

FDLA Board Installation.

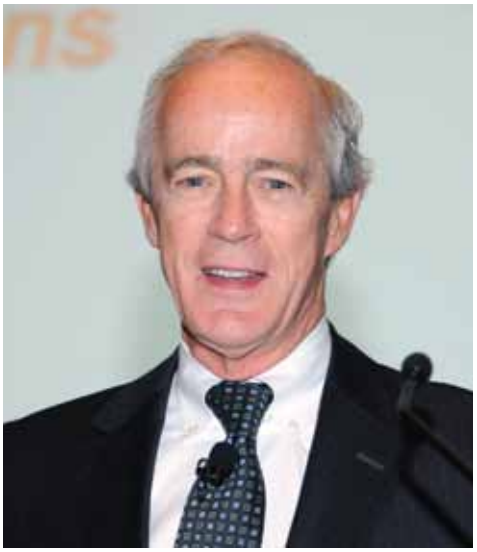
Friday Night Reception.

FDLA and NADL presidents meet with Florida Dental Association president and president elect.

Friday Night Reception.

Friday Night Reception.

Best of Show - Dentsply Prosthetics.



Above and Right:
Keynote Speaker Bob Ganley with Ivoclar Vivadent.

Peter Pizzi, CDT, MDT teaching at the Bego USA booth.

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Dr. Thomas Giacobbi, DDS, FAGD
Editorial Director, Dentaltown Magazine

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The Foundation
For Dental Laboratory Technology

No Train, *Big Pain.*

Employee turnover is one of the biggest expenses facing small- to medium-sized businesses, including dental laboratories. For every employee that you hire and train, you're investing time and money in that person and their skills.

And if they leave after six months or a year, it costs the business money. According to a study by the Center for American Progress, approximately one-fifth of an employee's annual salary is spent to replace that worker. And jobs that require specialized skills—such as being a dental technician—cost even more to fill.

So what does employee turnover and good hiring practices have to do with training? It comes down to engagement—how connected and valued new hires feel when they join the company. Understanding their jobs, feeling valued and connected to the culture can be key in keeping new hires past the honeymoon period of a new job.

In the past, dental laboratories trained employees using over-the-shoulder methods—and many still do, particularly for certain digital procedures. For example, Peterson Dental Laboratory in Delray Beach has a large conference room and a big-screen television that's connected to a microscope. Trainees gather for lunch-and-learns, which frequently feature sessions about digital workflow.

Pairing a new employee with an experienced technician is still a valuable way to learn some skills, but at many dental laboratories training is much more robust. At Knight Dental Laboratory, CDL, DAMAS, ISO, in Oldsmar, over-the-shoulder training is just one element of an extensive program that dovetails into almost every other aspect of laboratory life. From basic human resources training to high-level quality programs, Knight spends many weeks training new hires and it also spends a fair amount of money on the effort.

Photo: DSG Clearwater, DAMAS

Indeed, dental laboratory training may actually begin before the employee is hired. Rigorous pre-hire screening is important in making the right personnel decisions, which will ultimately guide your training program later on.

"Many laboratories say, 'We are not going to invest because we don't know how they are going to do,'" said Knight CEO Warren Rogers. "Once we identify we have the right employee that has some of the skill level and aptitude we need, we will invest heavily to insure their success. One of the things they should do is to invest heavily in the beginning. … You need to make a sure you have the right person. We spent a lot of resources up front."

The same is true at Dental Services Group Clearwater, DAMAS, where much of what happens during training is dictated by the pre-hire interview process, which, if the potential employee makes it through the first phase, involves a paid half- to full-day of work, where an employee's true skills can be evaluated.

"Training begins in the interview process," said DSG Clearwater General Manager Kevin Hudi. "Their proficiency rating dictates who is going to train them and what specific tasks they are going to be trained on. We have a step-by-step training itinerary, with a checklist of items they are going to work on, and either a department manager or someone else doing over the shoulder training. At each step in the training, they have to prove competency."

At Knight, new technicians first go through standard human resources training. They learn about safety, harassment policies and are given a tour of the laboratory. They do some over-the-shoulder training, working with an experienced technician, mostly on the digital work flow side of the process. However, that's just one small part of a much larger on-boarding procedure. Knight Dental Group is DAMAS and ISO13485 certified, so teaching the quality process is a major focus of any new hire training.

"Every single employee goes through some specific areas," Rogers said. "We use an ISO 13485 medical device quality system, which is like DAMAS on steroids. Every new employee goes through CIP—continuous improvement processes—and they get briefed on the culture of the company, corrective actions, improvements in what we do, and barriers that may interfere with quality. Some technicians

Photo: Knight Dental Group, DAMAS, CDL, ISO

who come to us are not familiar with our quality programs and it is a bit of a shock to the system. We do things a little differently."

Knight is a PTC and Pro-Touch laboratory, so new hires participate in those trainings, which include basic mouth anatomy and morphology, among other courses. Technicians are generally ranked according to the PTC system early on in their tenure at the company.

"Each technician has a ranking of T1-T6," said Rogers. "At each level, there are certain expectations. As the technician comes up the levels, they have to go through additional Pro-Touch training that also covers their job expectations."

As a training module vendor, PTC provides online and seminar options for laboratories. The company's programs and seminars really focus on fundamentals, which may seem anachronistic in today's high-tech environment. Machines, points out PTC President James Mahan, CDT, are unforgiving. No matter how skilled a technician may be on software, if he or she doesn't know the fundamentals of anatomy and ceramics, they will not be able to create perfect restorations.

"In some cases, people have taken their eyes off the ball of how fundamental dental lab technology

Teaching **the quality process** *is a major focus of any new hire training.*

Many laboratories don't take the time to think through, in great detail, **what they expect.**

training should be done. Many labs call saying they are having problems on contouring what's coming out of the milling machine," Mahan said. "Perhaps that technician never understood anatomy as well as they should have and their weaknesses show up in this area. When we train them on missing fundamentals, we see dramatic improvement."

Peterson Dental Laboratory also uses the PTC system, depending on the job and the skill level. And within each department, there is a minimum and maximum standard.

"They have to get acquainted with the minimum standards and know who you defer to when problems arise," said Chris Peterson, operations manager. "Before they work on live cases, they work on display models for every product line and they have to complete a set for every product they work on. After that, the manager grades them."

The process sets the stage for later training and promotion. Technicians interested in moving up have to create at least five models that meet the minimum standard. That way, technicians hoping to work on more complicated cases can work toward the standard and move up in both responsibility and pay grade.

At Dental Services Group in Clearwater, which has about 45 employees, the quality system is also very important to the on-boarding process. Each new hire goes through an introduction to DAMAS that involves all the aspects of quality, as well as the rules and regulations of the company, its culture and expected behaviors. They are given a written job description that outlines each job as well as their responsibilities.

Hudi advised dental laboratories to systemize their employee training program.

"Do not go into it without a written game plan," he said. "Each employee needs a direct line person who follows up with an HR person or the general manager with status updates about that person's progress. In some cases, a manager identified weaknesses or flaws right away, but didn't tell anyone. That employee continued through the training process until the problems surfaced later on."

Dental laboratories should establish benchmarks and expectations based on each individual's experience level and the expectations of the job. Many laboratories don't take the time to think through, in great detail, what they expect in terms of hourly or daily productivity, Hudi explained. Often hiring managers softball expectations of the position during the interview process. And when the employee is on board, the dental laboratory says: Okay, now this is what we really want you to do.

"The more you can outline expectations in quantifiable terms, the better chance you are going to find the right employee and be able to give them the tools to be successful," he said.

For dental laboratories that want their employees productive right away, the six-week training period (or any training period, for that matter) might seem frustrating. Time spent on the front end, however, keeps your employees from having to do too many remakes or spend time training and reviewing skills they should already have. Also, proper training can help new trainees learn the culture and expectations of their work environment. It shows employees that they are valued, and that the company has invested in their success. So, while it may seem unproductive to spend time training, you're acting to provide employees with skills, direction and morale—all of which will have a significant impact on your dental laboratory's bottom line.

Photo: DSG Clearwater, DAMAS

Seven Essential Steps For Effective Employee Training

By Linda Pophal

Hiring new employees can be stressful enough. Once they show up on that first day of work, you may feel like your job is over—but it's just beginning. Making sure you provide appropriate training, from the get go, can make the difference between a long-term, loyal and effective employee and an ineffective slacker. Here are seven essentials of effective staff training.

1. Focus on Individual Staff Needs

Not every new—or existing—employee has the same training needs. A new employee with extensive experience doing the same type of work that will be done in their new job will obviously need less formal training than a new employee who has never specifically done this type of work before. Too often, training is designed to be one size fits all. Generic training can be too basic for a new staff member. The first step in any training process is to evaluate the individual needs of the trainee. Where are they at in terms of their knowledge, skills and abilities related to this job? Where do they need to be? Training should focus on filling that gap.

2. Create a Desire to Learn

The most effective training is delivered to trainees who are motivated and interested. In most cases, new employees do come to you with that desire. They're fresh. They're motivated. They want to succeed in their new position. But what if you're retraining an employee for a different position? One that he or she may not necessarily be interested in? Or what if you're training an employee on technology that he/she is intimidated by? These situations can create anxiety and hamper the effectiveness of training. How can you create a desire to learn?

Photo: DSG Clearwater, DAMAS

Photo: Knight Dental Group, DAMAS, CDL, ISO

Here are some tips:

- Listen to the employee's concerns. If you can understand—and address—the employees' worries and insecurities about training, you can remove a significant barrier to learning.
- Provide examples of specific, tangible ways that the training will help the employee.
- Involve the employee in establishing training objectives, timeframes and methods (more on these later).
- Focus on development not remediation. Nobody likes to feel that they're inadequate or lacking in critical skills and knowledge needed to perform in their jobs. But many people can be motivated by the prospect of developing new skills and abilities.

3. Make Learning Fun

Learning doesn't have to be tedious. Professional trainers speak of creating a learning environment. This means many things, including the need

The first step in any training process is to **evaluate the individual needs** *of the trainee.*

Some prefer theory, while others like **hands-on** *application.*

to remove trainees from their day to day responsibilities so they can focus on the training and making sure there is enough variety built into the training that trainees will remain engaged.

4. Develop an Evaluation Plan

Training should never be done simply for the sake of training. Make sure that you have some method in place to evaluate the effectiveness of the training. Maybe this is a pre- and post-test to determine whether specific concepts have been learned. Make sure that you build in some means of measuring training effectiveness. And, if you find that the training has not been effective, take the time to reevaluate the methods and processes used and to make necessary adjustments.

5. Help Employees Apply Learning to the Job

Just learning concepts without understanding how those concepts apply to the real job is a waste of training time and money. Employees need to understand how what they're learning applies to what they will be doing. One way of ensuring that this transfer will take place is to involve supervisors and co-workers in the training process. They should understand what is being done in training and should be partners in ensuring that the value of the training is supported and reinforced in the work setting. When supervisors scoff at the training or consider it a waste of time, never reinforcing to employees how what they learned applies to their jobs, it sends a signal that the training was useless - and undermines your investment (in time and dollars) in that employee.

6. Choose the Right Training Method

People have different learning styles and preferences. Some people read the instructions first, others refer to the instructions only after they've tried to figure it out on their own. Some prefer theory, while others like hands-on application. To the extent that you can (obviously it can get expensive to design individual programs for every employee...) make an effort to match training methods to learning preferences of employees.

7. Follow Up and Evaluation

How many employees (and business owners) have three-ring binders from training sessions that they've never looked at after the training ended? Training is an ongoing process, not a discrete event that occurs once and is then forgotten. Make sure that you're building in methods of following up on what was learned, evaluating the effectiveness of that learning, modifying future training, etc.

And, don't assume that once you've trained an employee your job is done. You should be continually assessing your employees' knowledge, skills and abilities and providing training, as necessary, throughout their employment.

About the Author:

Linda Pophal is the owner and CEO of Strategic Communications, LLC, and is a marketing and communication consultant with 20 plus years experience in strategic marketing. Pophal helps companies use strategy to address their communication challenges whether internal (employee) or external (community, media, customer).

Photo: Knight Dental Group, DAMAS, CDL, ISO

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The Ceramic Revolution

By Uri Yarovesky, CDT

Hilla Technology was developed by the author, a lab owner and ceramist, who had been searching for answers on how to address translucency, predictability, and incisal characterization. Selecting a shade is based on interpretation. Sending this information to the laboratory that is using the shade selected as a guide is another level of interpretation. **Figure 1** shows a typical drawing in the lab depicting what the doctor and patient selected for the final outcome.

Figure 1

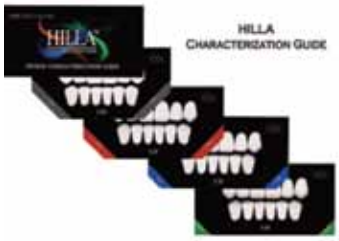


Figure 2

Figure 3

Every ceramist will know how to read this information, yet the results may differ based on their interpretation or artistic skill level. Hilla technology helps to provide not only a more direct way of communicating this information, but it also provides a specific product that is applied to the restoration that directly represents the selected information.

Hilla technology begins with a characterization guide that the dentist and the patient use to select the degree of characterization desired. The guide has four levels: I-00, I-20, I-30, and I-40 (**Figure 2**). The I-00 has no characterization and is used to explain what having no characterization or a monochromatic restoration will look like and the other levels show different intensities and how they affect the overall appearance of the restorations.

Here we have taken two pressable veneers and fabricated them to full contour. Our focus in the laboratory is to maintain the strength of our pressable restorations. Avoid cutting back the restoration whenever possible. The cut-back technique provides the ceramist with more room to build in the internal structures. However, materials being used to add-on increase the chances of failure due to dissimilar add on materials. The strength of the add-on material is significantly lower than the core material.

The ideal situation is to build the case to full contour and then stain the surface. Staining is

contingent upon the abilities of the individual ceramist and their ability to recreate a true realistic look of the tooth. It is very challenging to paint in such a small environment and be predictable and consistent. The Hilla Digital Transfer, which is a preprinted ceramic color pattern, solves this problem with ease and very little effort.

In this article, we have taken two units and waxed them up to establish a selected shape, function, general anatomy, and surface details (**Figure 3**). The units are then sprued and invested, ready to be pressed in a pressing oven (**Figure 4**). For this particular exercise, the material choice is VP 6 by Pentron. This material is a nice white color that is also somewhat translucent and opalescent. The material is pressed and divested (**Figure 5**).

The veneers are fitted on to the dies (**Figure 6**). The shape, anatomy, and surface texture are finalized. The next step is to glaze the unit. At this point, if there are any general overall colors to be introduced to the mix, add those colors along with the glaze. The Hilla Digital Transfer glaze is the key to the process. During the glazing step, the Hilla Digital Transfer is brought to the same glaze temperature and causes the fusion of transfer to the tooth. This glaze (Hilla Glaze) is able to be fired at a wide range of temperatures and used on a wide spectrum of ceramic materials (**Figure 7**).

The intensity of the characterization selected is a HDT I-30 for this particular case. Based on the size of the restorations, we select a digital transfer from the medium-sized card and verify it by holding the tooth to be worked on next to it (**Figure 8**). Using a pen such as a Sharpie, mark the tip of the lobes. The tips of the lobes can be placed at the edge of the tooth or they can be kept away from the edge to introduce more translucencies.

A mesial and distal marking will also help with the orientation of the mesial/distal direction and the consideration of the desired long axis of the

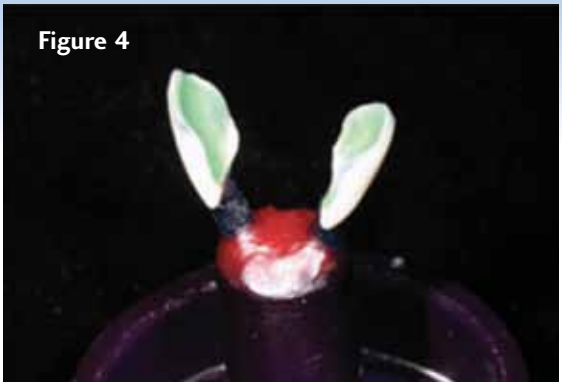


Figure 4


Figure 5


Figure 6

Figure 7

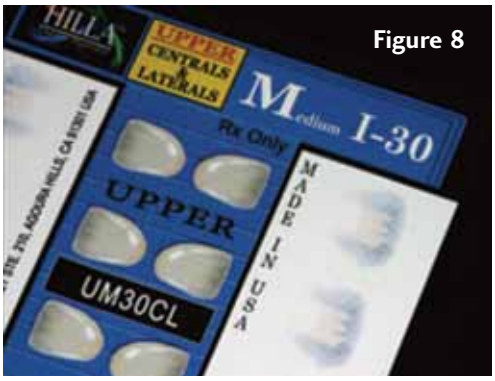


Figure 8

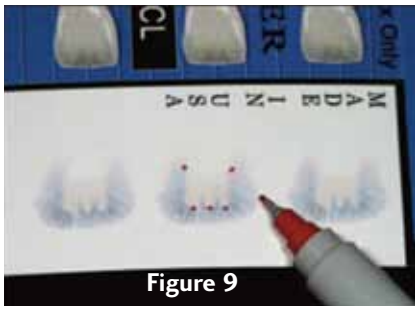


Figure 9

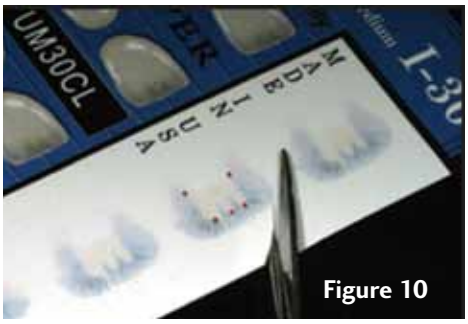


Figure 10

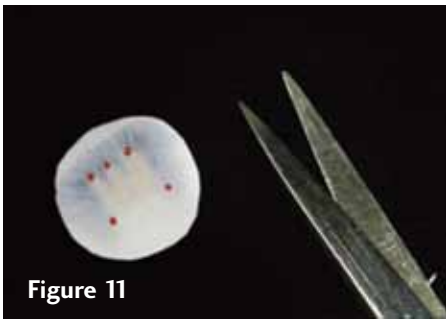
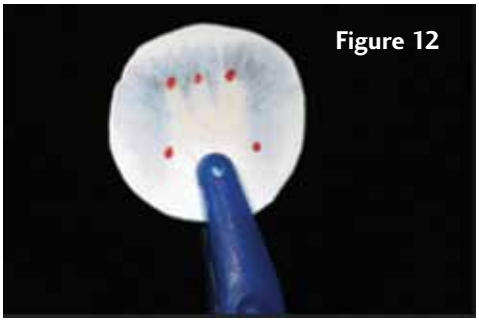


Figure 11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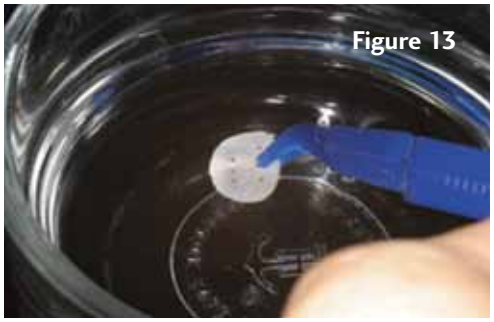
Figure 13

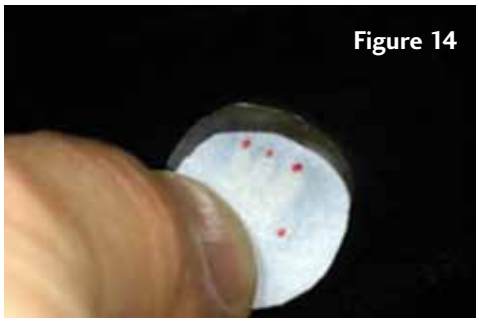
Figure 14

Figure 15

Figure 16

tooth (**Figure 9**). Use scissors to cut the HDT from the card (**Figure 10**). Then proceed to trim the excess (**Figure 11**). Use tweezers to place the transfer in tap water and hold in the water for about 45 seconds (**Figures 12 and 13**). Use fingers to gently apply a sliding pressure to release the HDT from the paper (**Figure 14**). Using the tools provided, place a small amount of rope wax onto the tool to help hold the veneer to aid in the application process. Place the HDT on the surface of the tooth (**Figure 15**). Align the Sharpie dots in the proper locations and use the adapting tool while applying slight pressure to remove any air or moisture from the surface and to aid in adapting the HDT to the surface of the tooth (**Figure 16**). Ensure that no air or water remains. Any excess will be burnt off in the firing cycle (**Figure 17**).

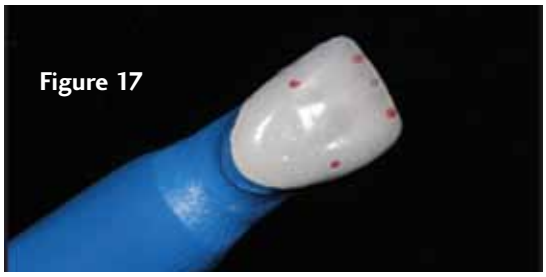

Figure 17

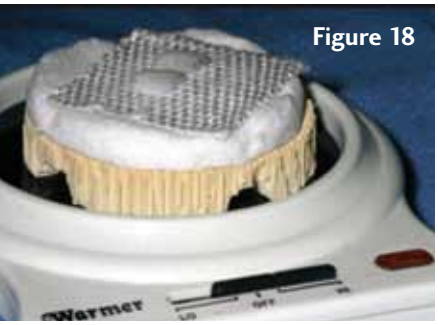

Figure 18

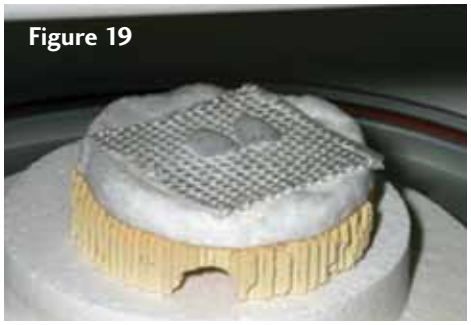

Figure 19

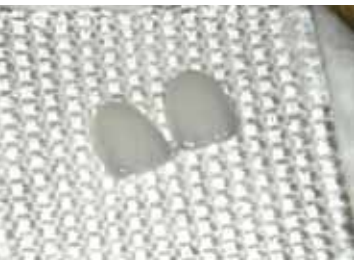

Figure 20

Figure 21

Ensure that there is no moisture remaining, which could cause the water to boil and cause a stain bubble. The tray with the veneers is placed on a hot plate at a warm temperature so that the heat will dry the moisture rather than boil it (**Figure 18**). The veneers are placed in the porcelain oven at a cycle specified for the HDT—glaze is set for the firing of the HDT (**Figure 19**).

The veneers were cooled (**Figure 20**). Then they were placed on a model with a tooth-colored background to view the details (**Figure 21**). If any additional colors need to be added, such as hyper calcification, horizontal white lines, or any additional cervical colors, they can be added.

As a general rule, to obtain and protect the colors we place on the surface, it's always recommended to place another coat of glaze to keep the Zip-loc® effect on the colors. The Hilla Digital Transfer can be used internally as well with an enamel overlay placed over the HDT to provide for a different effect.

In summary, Hilla Technology provides a standardized tool to help communicate the incisal edge characterization, first between the patient and the doctor and then between the doctor and the laboratory. This information then correlates to a specific product, the Hilla Digital Transfer, which, when applied to the surface of a restoration, provides the dentist and patient with a predictable result.

About the Author:

Uri Yarovesky, CDT, a ceramist, owner and President of Opus One Laboratories, Inc. and owner and President of Hilla Technologies in Agoura Hills, Calif., is a graduate of Los Angeles Community College in dental technology. He was the 2011 recipient of the NADL Inventor of The Year award and the 2010 recipient of the Outstanding Contributions to the Art and Science of Cosmetic Dentistry award from the American Academy of Cosmetic Dentistry. Yarovesky has lectured extensively both in the United States and internationally. He is a current member of the AACD, IADFE, ASDA, NADL, CDLA and ACE.

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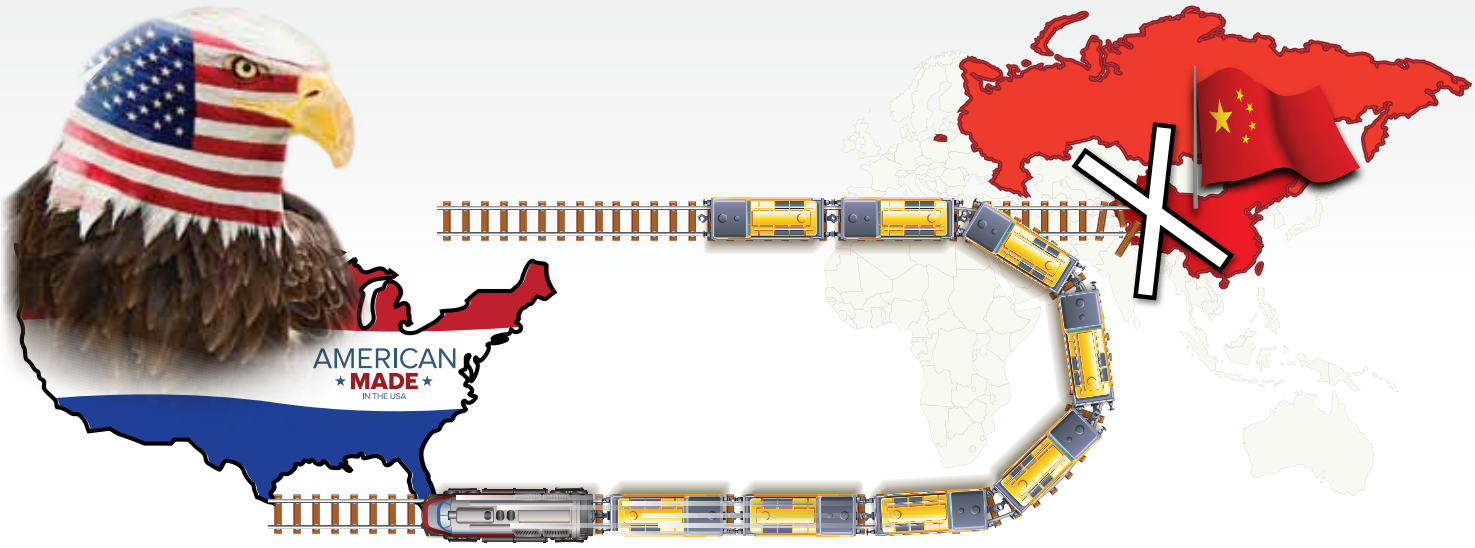

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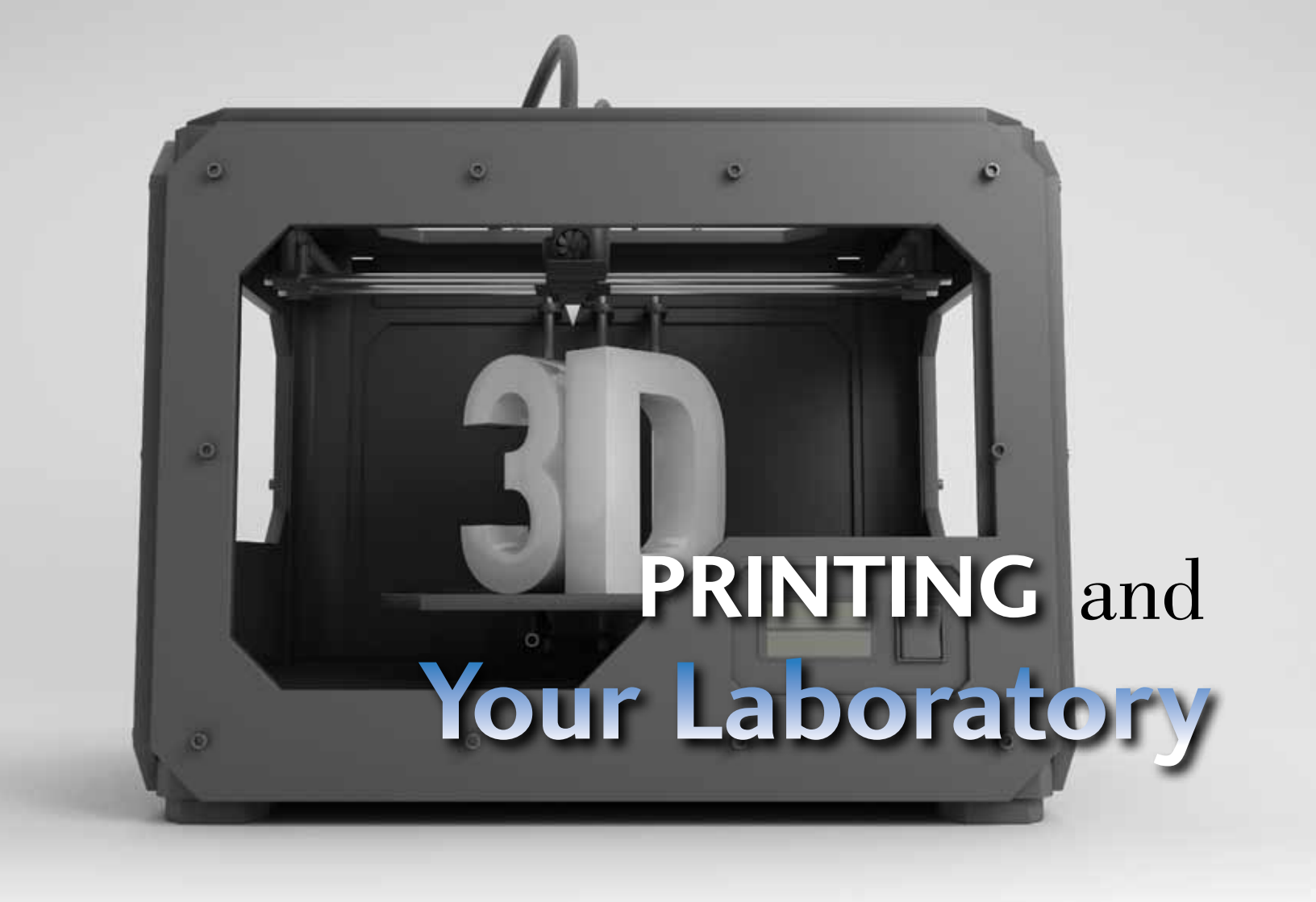


3D PRINTING and Your Laboratory

Last year, *The Harvard Business Review* ran an article called *3D Printing Will Change the World* and many dental laboratory owners and technicians are wondering when that change will happen.

3D printing has the ability to change dental laboratory economics.

The article pieced together all the ways in which 3D printing can have an impact on various parts of the manufacturing supply chain, from allowing companies to keep low inventories, to customization of products, to reducing the need to outsource to low labor cost countries.

Many of the advantages of 3D printing described in that article are applicable to the dental laboratory industry. As CAD/CAM and digital scanning become ubiquitous, so too will 3D printing. Another factor is that the cost of the machines continues to drop, and their uses continue to expand. So while you may not think you need one—or can afford one—today, you may very well find a use for a 3D printer in the future.

For those unfamiliar with the technology, a 3D printer is an additive manufacturing process. In other words, the printer simply adds layer on top of layer in the shape that's specified in digital file. 3D printers use primarily plastic, wax, ceramics and metal, although foodstuffs like sugar and chocolate are also used in 3D printing, as are human cells. Load a digital scan into the computer, hit print, and out pops a model, perfectly matched to the scan. Actually, it takes some time for the model to print, but it is a faster process than hand-building.

Consider that the single biggest quality issue in most dental laboratories is human error and inconsistency and you can see why 3D printing has the ability to change dental laboratory economics. The digital scan and subsequent printing process

takes the shaky and inexact hands of the technician out of the equation, thereby reducing remakes. While there may always be a place for hand building in the dental laboratory, 3D printing can vastly improve accuracy on some kinds of models and impressions. It also has the ability to change the experience for the patient and the dentist. No longer does the dentist have to spoon a bunch of unpleasant goo into a patient's mouth, who then has to bite down on the stuff to make an impression that may not be exactly right, only to return again and repeat the process.

An inter-oral scanner, digital file and a 3D printer takes much less time while keeping storage and material needs low. There is no waiting for a technician to build a model. All that needs to be done is for someone to take the scan and send it to the lab where someone presses print. Similarly, there's no storage problem at either the dental office or the dental laboratory—all the scans are stored digitally and the models are printed on-demand. The patient's record is a few megabytes stored on a computer chip. And 3D printing also has the potential to reduce costs for dental laboratories, so that those who find themselves under bid by outsourcing can compete on a more equal footing.

The digital printing revolution really began in 2009, according to Avi Cohen, director of global dental operations at Stratasys, a supplier of 3D printing to the dental laboratory industry.

"In 2009, we came to the point of no return," said Cohen. "There are too many digital things, from the milling machine to designing the crown, to ignore it. This is the direction the industry is going and nothing will stop it. This is a market that was traditional, handmade, for hundreds of years. The progress was faster than anyone predicted."

Cohen believes that 3D printing and its companion digital technologies will save the dental laboratory industry from obsolescence. With fewer people interested in learning hand building techniques, and the younger generation so engaged with technology, the sea change in the industry can attract a new kind of technician to the field—one who likes designing on a computer. Also, 3D printers are becoming less expensive every day, so even small laboratories should be able to afford it in the not too distant future. Without the speed, consistency and efficiency of digital technology and 3D printing, many mom-and-pop dental laboratories would be forced to close, Cohen added.

And, 3D printing is evolving every day—from accurate color matching to new materials, it won't be long before it isn't just the model that's being made, but the restoration itself. That may be a few years down the road, but with scientists actively working on printing viable human organs, teeth (or teeth-like materials) it can't be far behind.

A top-of-the-line 3D printer can cost $100,000 or more, but these days there are enough options that most laboratories can find a 3D printer that fits within their budget. And if you consider that your remake rate may decrease, it becomes even more affordable. Cohen noted that a complete quadrant set costs around $3.50 to produce (depending on the model, the materials, and so forth).

Sun Dental Laboratories' Chuck Stapleton, vice president of global operations, worked with a 3D printer as far back as 2004 in his father's small laboratory in California.

"At that time, they weren't made for the dental laboratory industry," Stapleton said. "It was a costly experiment."

After much research and due diligence, Stapleton said, Sun installed multiple printers about two years ago in its Clearwater. laboratory. The 3D printers are used for model printing as well as wax impressions. The laboratory also makes surgical guides with the 3D printer.

Stapleton explained, that, as with all such technology decisions, it's important to understand

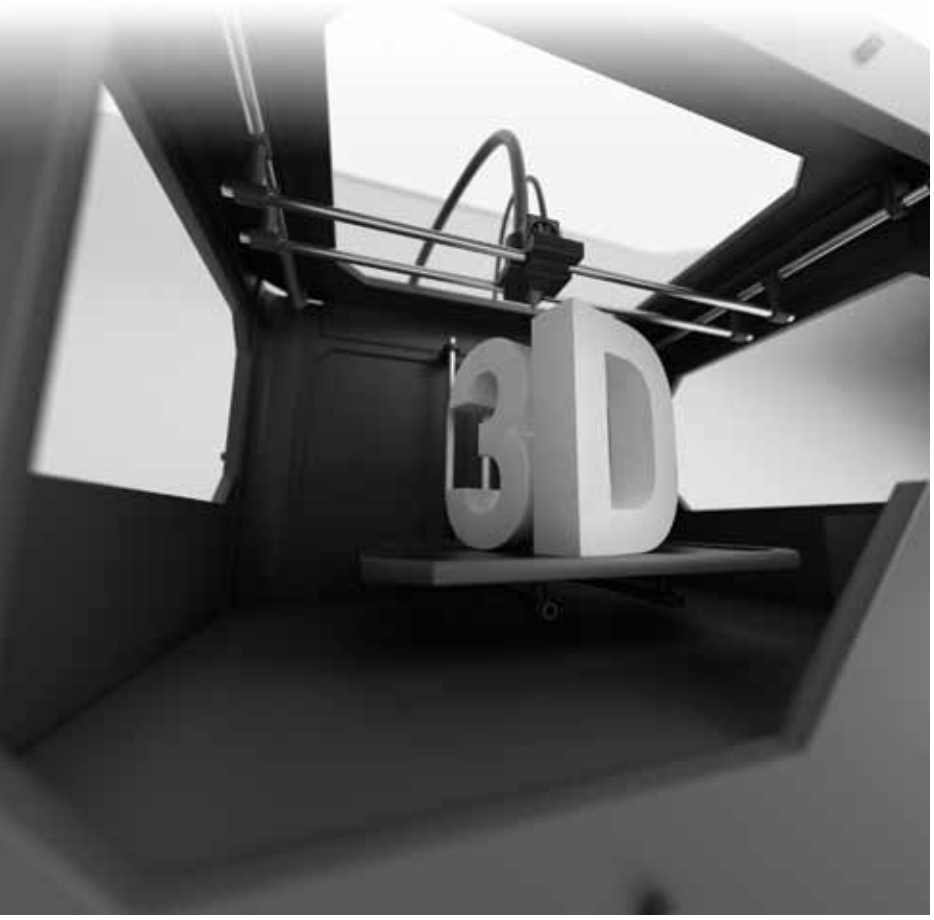
3D printing also has the potential to reduce costs for dental laboratories, so that those who find themselves under bid by outsourcing can compete on a more equal footing.

the capabilities of each 3D printer, and how those capabilities fit with the dental laboratory's products and expertise. For example, a dental laboratory more focused on orthodontics needs a different product than one building crowns and bridges.

A 3D printer can produce a more consistent product in a shorter turnaround time

"We did a significant amount of research," he said. "We looked at the total cost of ownership, ROI, the quality, and that the printer must meet a certain baseline criteria."

The printer you choose very much depends on your overall business, what kinds of cases you produce and the technical skills of your technicians. For example, some 3D printer companies are bundling all the necessary software (CAD/CAM, printer, etc) into one package and offer training on all parts of the process. Stapleton noted that if you are in a partnership with Henry Schein, than you may want to choose EnvisionTec printer, because the company offers support for that brand. If your laboratory is more focused on ortho-type projects, the Objet printers may be a better choice. Most importantly, make sure whichever company you choose has excellent product and technical support.



"That is the most important part of the decision you will make when it comes to which system to purchase," Stapleton said.

While it is easy to be seduced by the advantages of 3D printing, there are challenges and drawbacks—some even warn that, rather than being a boon to the dental laboratory industry, dentists could easily adopt the technology and cut the laboratory out of the equation altogether. That's not likely to happen, given the slow adoption of CAD/CAM among dentists, and the desire many of them have to work with patients and not spend time learning new technology.

At a cost of ownership of about $1,600 a month on average (depending on your financing package, your printer choice, what kinds of materials you are using), you would have to make sure you're doing enough models to justify the monthly payments, but don't expect, Stapleton added, to make a profit on the printer. Digital workflow all the way to printing may save on remakes and improve consistency, Sun hasn't really saved money by installing 3D. Despite their efficiency and relative ease of use, there is waste in the process, and material costs can really add up quickly.

"The cost of ownership is break even," Stapleton explained. "Consistency and quality is really the advantage. And you don't have to train people how to wax. You train them how to design on the computer. As far as ease of use and training, if someone already can run a milling machine they can definitely run a printer."

Still, 3D printing can improve efficiency and even open doors to new business opportunities. For example, a dental laboratory may want to become a model production facility to which other laboratories can outsource; they can produce surgical guides for dental offices with an accurate CAT scan.

Perhaps most importantly, a 3D printer can produce a more consistent product in a shorter turnaround time. For Sun Dental Laboratories, that combination has grown its business.

"There's a halo effect," Stapleton said. "We are able to produce a more consistent product so we have more customers."

The future of 3D printing knows no bounds—from direct-to-metal printing, human organs, parts for (and even entire) automobiles, and of course teeth—the technology is here to stay.

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ObamaCare From The HR Chair

By Raleigh 'Sandy' Seay

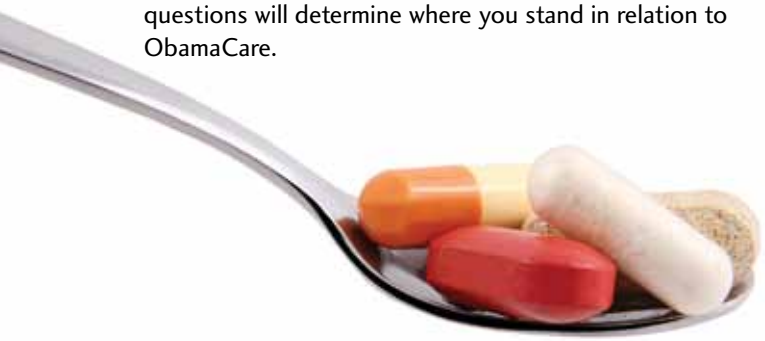
One of my good friends for many years is Father Rick Lobs, an Episcopal priest who had a lot to do with my journey across the Tiber some six years ago. Rick once said that in most situations in life, we have a role to play and it's important for us to play that role. I thought about Rick's advice as I was thinking about ObamaCare and all of the uncertainty that is swirling around it. If we've ever seen a moving target in employment issues, it is ObamaCare.

From an employment standpoint, we see three key elements of ObamaCare and note that each element has a role:

1. An insurance role
2. A tax/accounting role
3. An HR role.

Our advice is to stay close to your insurance representatives and your tax/accounting consultants so that they can play their important role and give you their very best and latest advice. Your insurance representative will be your principle advisor on ObamaCare. From the HR chair, here's the role we play. We know that, beginning in 2015, the business mandate becomes effective and here's what we know so far, as of today.

1. Effective January 1, 2015, all businesses over 50 employees are designated large employers and must provide health insurance, or pay a fine. The fine is $2,000-$3,000, excluding the first 30 employees.
2. Therefore, the two primary questions you have to ask are how many employees do you have and how many hours per week do your employees work? The answers to these questions will determine where you stand in relation to ObamaCare.



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3. You determine the number of employees you have by counting salaried employees, hourly employees who work more than 30 hours per week, and full time equivalents for part time employees, based on a formula (total hours for part time workers in one month divided by 120). If this number totals 50 employees or more, you are designated as a large employer.
4. Employees of a large employer who work 30 hours or more per week are considered full time and must be provided insurance. Paid benefit time like vacation and sick leave are included.
5. If you have less than 50 employees, you do not fall under the business mandate and are not required to provide health insurance to your employees.
6. You are not required to provide health insurance to employees who work less than 30 hours per week, even in a large employer.
7. The cost to the employee may not be more than 9.5 percent of his or her income.

What Management Must Do Now

1. All employers, no matter what size, must send the ObamaCare notification to employees, either electronically or hard copy. This should have been sent as of Oct. 1, 2013. If you haven't sent this notice yet, contact Seay Management and we'll get it for you.
2. Determine if you are a large employer and, thus, are required to offer insurance to your employees as of Jan. 1, 2015.
3. Identify your employees are working 30 hours per week or more and, if you are a large employer, these are the employees to whom you must offer insurance.
4. If you have less than 50 employees, work with your insurance representative about health care insurance for your employees. (Notice – the date for the SHOP exchange has just been delayed.)
5. Talk with your insurance representative about ObamaCare and the plans that will meet the ObamaCare standards.
6. Talk with your accountant about the tax implications of ObamaCare for your business.

Source: Seay Management

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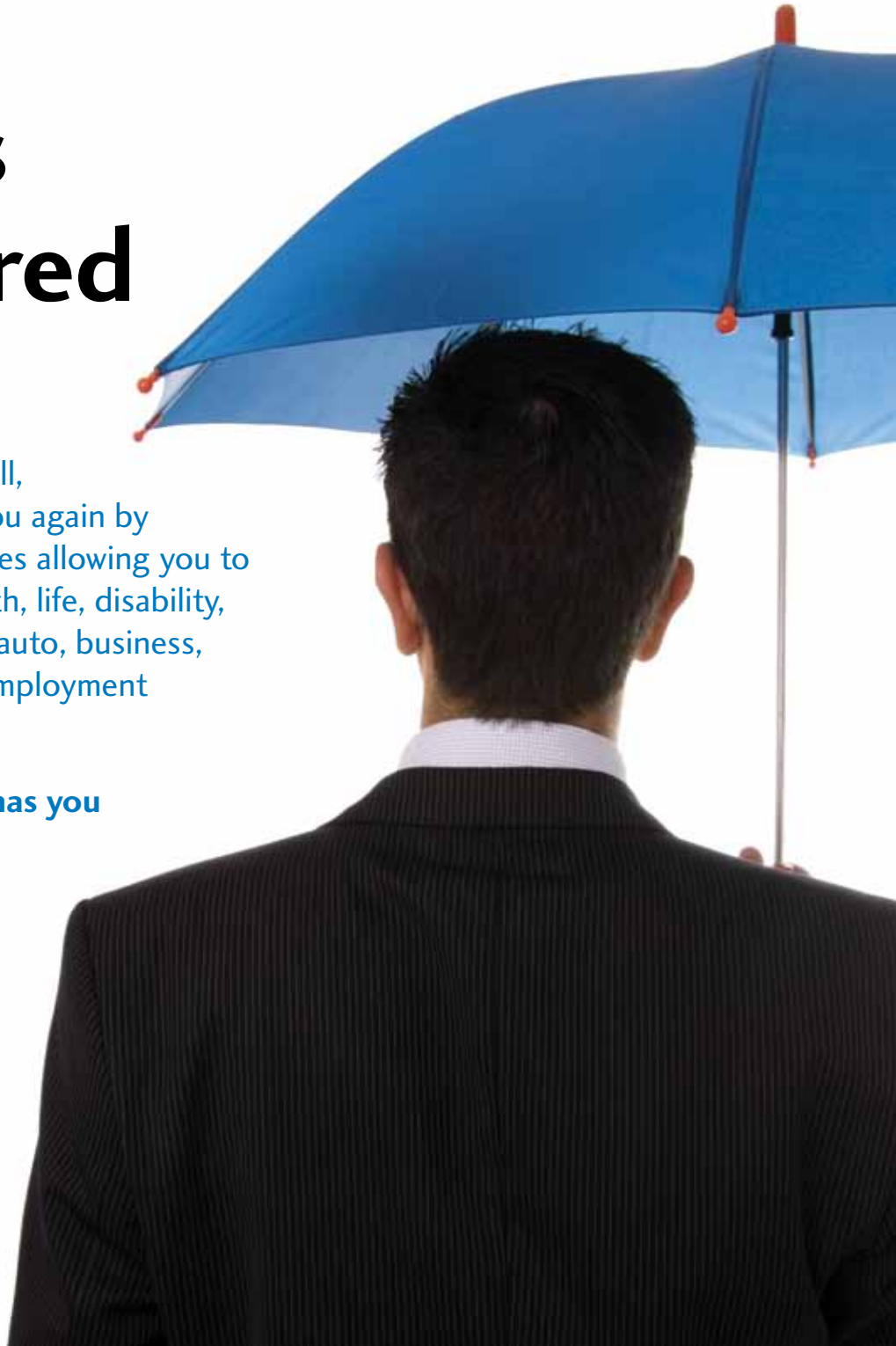

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Remembering FDLA's Past and Looking Toward FDLA's Future

As part of the Florida Dental Laboratory Association's celebration of its 50th anniversary, *focus* has been talking with several past presidents throughout the year to help form a picture of where we've been as an association and where we're going. Recently, *focus* talked with Charles E. McClemens, CDT, TE, who was president from 2009 to 2010.

We Want You

Here at *focus* we are constantly on the hunt for Florida Dental Laboratory members to feature in our Focal Point interview. If you, or someone you know, would like to be featured, please e-mail us at cassie@thewritemessage.net with Focal Point in the subject line. We want to see you in *focus*.

Why is FDLA needed?

FDLA is essential. It is the collective voice of dental technology with the dental team and the public in Florida.

What does it say about FDLA that the organization has been around for 50 years?

It says that FDLA has a substantial history in our state as well as the fact that it has established its place in the dental laboratory community as a state association leader nationwide.

What was the most important thing FDLA accomplished during your tenure as president?

As president, my contribution was establishing a savings program so that we are financially more secure.

What do you think is the most important thing FDLA has accomplished in its 50 years?

Bringing a majority of laboratories in the state together as a strong force for the future of dental technology.

What would you like to see FDLA accomplish in the next 50 years?

I would love to see FDLA continue to empower dental technicians and dental laboratories so they have the ability to control their future in dentistry.

Celebrating 50 Years
FDLA
1964-2014