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Here For You in 2015

appy New Year! FDLA's board and I hope that your year ahead will be filled with joy, peace and professional fulfillment. I personally have experienced some changes in the past year, but one thing remains for certain that technology is everyone's future.

This edition of *focus* magazine has several excellent articles in regards to digital technology, printers and digital scanners. These items are no longer considered a trend or futuristic. They are current and are here to stay. The FDLA realizes this and we are putting on several programs introducing you to different brands and systems of the digital scanners. Our goal is to help you learn about all the new technologies and processes that are out there. Another great place to learn about digital technology will be the 2015 Southern States Symposium & Expo in May. We are going to have excellent speakers, tremendous hands on courses and our fantastic exhibitors, so save the date!

This educational outreach is just one example of how FDLA is dedicated to helping your laboratory succeed, but we couldn't do it without you. Member participation in any FDLA event not only helps your laboratory and your personal career, but also helps to strengthen your state dental laboratory association and, thus, the industry in Florida.



"Member participation in any
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the industry in Florida"

In addition to educational outreach, FDLA is committed to basic standards for the dental laboratory professional.

"States that have enacted basic standards see higher levels of membership in their state dental laboratory associations. Freedom of association is one of our basic constitutional rights. There is power and value in gathering to share and learn from common experiences and to collectively address common issues. Proponents of standards typically point out that participation in a professional association benefits both the participants and the profession," states FDLA in-house council Eric Thorn, Esq. "Participation in professional

associations allows the participants to develop strategies to address new trends and to share knowledge about new materials, equipment and techniques. Strong professional associations also offer younger professionals the opportunity to develop relationships with more experienced professional mentors.

More organized professions gain greater recognition for the contribution made by their work."

I cannot stress enough the importance of maintaining the FDLA, being a member of a strong organization in our professional field and supporting basic professional standards. I hope to see all of you in May.

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

focus

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Florida Laboratories and **Audits**

Must read information to help you understand potential tax liability.

Why, How and When

Bernie Jaroslow, CDT, takes you through what you need to know to make the digital transition at your laboratory.

18 Perfecting Dental Treatments via 3D Printed Models and Removable Dies

Avi Cohen shows the ease of utilizing consistent and reproducible 3D printed verification protocols as a means of ensuring the success of the restorative treatment plan.

22 Training Tomorrow's **Technicians**

24 FDLA Membership

The Hub 26

FDLA news and recent happenings.

28 Zero In

Mark your calendar for these upcoming events.

30 Focal Point

Khadija "K" Adams, CDT

NADL Winter Daze

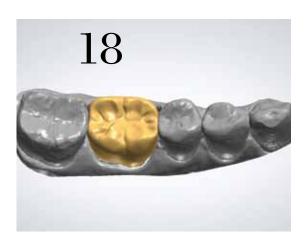
Voluntary Equipment Purchase

These two photos, as well as the images appearing on pages 10, 12 and 14 of this issue, are also published in the February 2015 Journal of Dental Technology.

Cover Photo (above): Sharon Dowd

Cover Photo (below): Kevin Hurst, CDT





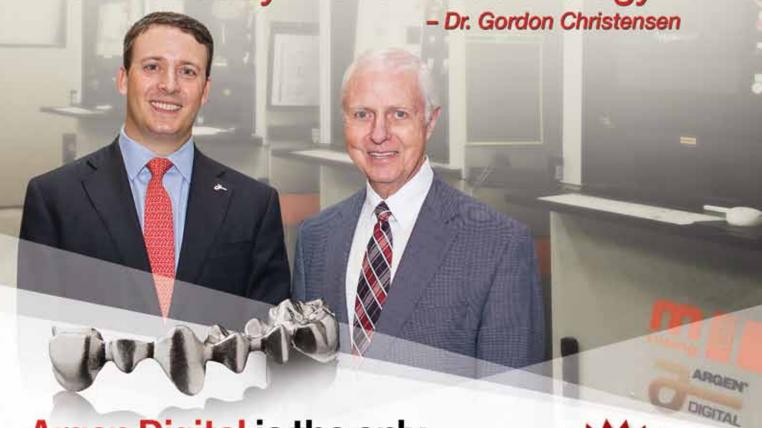
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NADL Brings Educational Opportunities

to Midwinter Meetings

f you are one of the many leaving the Sunshine State for the Feb. 26-28 Chicago Midwinter Meetings, be sure to check out the great courses being offered by the National Association of Dental Laboratories. The NADL educational courses will be held Feb. 28 at LMT Lab Day at the Hyatt Regency Chicago. Topics range from business planning and professional development to technical education.

8 a.m. - 9 a.m.

Survey of Current Regulatory Issues

Speaker: Eric Thorn, Esquire – NADL

Credits: 1 documented regulatory standards

This session will cover the most relevant issues on the current regulatory landscape and will focus on helping dental laboratory professionals and business owners identify and respond to current regulatory issues that could impact laboratories. Topics will include the Health Insurance Portability and Accountability Act, Sunshine Act, Unique Device Identifier, Food and Drug Administration, DOL Classification and state minimum standards.

9:15 a.m. – 10:45 a.m. The Art of Digital Morphology

Speaker: Jessica Birrell, CDT – Capture Dental Arts, Inc.

Credits: 1.5 documented scientific

Birrell will explore the individual characteristics that define the anatomy of each tooth, enhance natural esthetics and provide the tools necessary to design in a digital world. Avoid common anatomy mistakes when a tooth is morphed and discover simple tricks for designing anterior restorations. Plus, attendees will receive a sneak peek into the upcoming The Art of Morphology book, course and videos.



11 a.m. – Noon Mergers and Acquisitions in the Dental Laboratory Industry

Speaker: Bennett Napier, CAE – NADL

Credits: 1 professional development

This course will provide an overview of laboratory industry consolidation. It will include discussion on current and future entrants making laboratory acquisitions and outline formal steps to go through whether you will be a buyer or seller of a dental laboratory in the future.

1:30 p.m. – 3 p.m. Partnering with Specialists by Enhancing Chairside Services

Speaker: Jeff Stronk – Treasure Dental Studio, CDL

Credits: 1.5 documented scientific

Dental laboratories and dental specialists are both looking for the same thing—referrals from a general practitioner. Offering enhanced services can result in a greater growth of cases for both parties and enhanced dentistry for patients. Attendees will learn about proven methods that introduce and expand chairside services as a business strategy as a means of differentiating your laboratory. Topics will include the teeth-in-a-day concept, immediate temporaries and the use of intra oral impressions to streamline the implant restorative process.



3:15 p.m. – 4:15 p.m. Earning the CDT/CDL/DAMAS

Credentials

Speaker: Rachel Luoma, CAE – NBC Credits: 1 professional development

This mini session will provide an overview of the certification process for those interested in becoming a Certified Dental Technician (CDT), Certified Dental Laboratory (CDL) or accredited Dental Appliance Manufacturers Audit System (DAMAS) laboratory. Topics covered will include the prerequisites for certification, the standards themselves, the process for certification, and tips for those looking to earn their credentials.

There is a \$35 fee for NADL members, CDTs, RGs and Foundation donors to attend and a \$60 fee for non-members to attend. However, one fee gets you access to the entire day of courses. Plus, all funds will go to the Foundation for Dental Laboratory Technology to help support grant programs for schools, education and scholarships.

Please RSVP at www.nadl.org. Deadline to RSVP is Feb. 20. Registrations will also be accepted onsite and total registration is limited to 100 attendees.



Learn more at www.nadl.org.

JOIN the Florida Dental Laboratory Association

FDLA VALUES STATEMENT

- · INTEGRITY
- · LEADERSHIP
- RECOGNITION
- · SAFFTY
- ACCEPTANCE
- INNOVATION



BE A PART OF THE FDLA TEAM

Stay informed on what is happening in the Florida dental laboratory profession. Protect your business, enhance your profession and utilize the association's valuable member services.



VISIT US AT: www.fdla.net



Florida Laboratories and

Voluntary Equipment Purchase Audits

ecently, a number of Florida dental laboratory owners have received letters from the Florida Department of Revenue regarding a voluntary audit of equipment purchases that may have required sales tax. The Florida Department of Revenue can ask a business to go back in their records for a four-year period. Here is some information to help you



The bottomline for dental laboratories in Florida is:

- The finished restoration as sold to the dentist from the lab is exempt from state sales tax.
- Raw materials used in the manufacture of the finished restoration are exempt from state sales tax.
- Equipment purchased by a dental laboratory is not exempt from state sales tax.
- Consumable supplies purchased by a dental laboratory are not exempt from state sales tax.

Most products that are sold to dental laboratories become a component part of the dentures, dental crowns, bridges, and other products manufactured by the dental labs for sale to dentists. Typical raw materials that are tax exempt include but are not limited to alloys, acrylic and porcelain. Sales to dental labs of equipment and consumable supplies are not exempt from tax, and the vendor should collect tax from the customer (i.e. dental laboratory). Further, the finished restoration as sold to the dentist is also exempt from state sales tax as it is considered a medical device for Florida sales tax purposes.

What is the taxable status of various dental products and what is the proper documentation required for exempt sales?

The purchase by a dentist or a dental lab owner of raw materials that will become component parts of medical or dental products that will in turn be dispensed to a healthcare patient by a healthcare practitioner is exempt from tax. One-time use products, such as dental impression materials, that contain the FDA warning "Rx-Only" would be included within this category.

For sales of medical products that are to be resold, and which are not "Rx-only", to dental labs and dentists who are registered for sales and use tax purposes, a copy of their Annual Resale Certificate should be obtained. Sales to dental labs and dentists of equipment and consumable supplies are not exempt from tax, and the vendor should collect tax from the customer.

The answer provided above is from the Florida Department of Revenue *Technical Assistance Advisement 03A-003*, which focuses on a universal scenario in the dental laboratory industry.

Please note that Rule 12A-1.021 (1)(b) of the Florida Administrative Code, provides in

part that gold, silver and other materials/devices temporarily or permanently incorporated into the human body by physicians or dentists shall be exempt.

For sales of medical products that are to be resold, and which are not "Rx-only", to dental labs and dentists who are registered for sales and use tax purposes, a copy of their Annual Resale Certificate should be obtained. For sales of non-Rx materials to unregistered dental labs and unregistered dentists, an affidavit should be obtained which states that the specified products will be incorporated into a patient pursuant to a doctor's orders and are therefore exempt from tax, pursuant to section 212.08(2), Florida Statutes.

A dental laboratory owner should work with their suppliers, as the vendor should collect and remit the appropriate sales tax on equipment and consumable supplies to the state or Florida. If a supplier is not doing so, the dental laboratory needs to work with their own accountant or CPA to determine if they need to register with a sales tax number and remit the applicable sales tax.

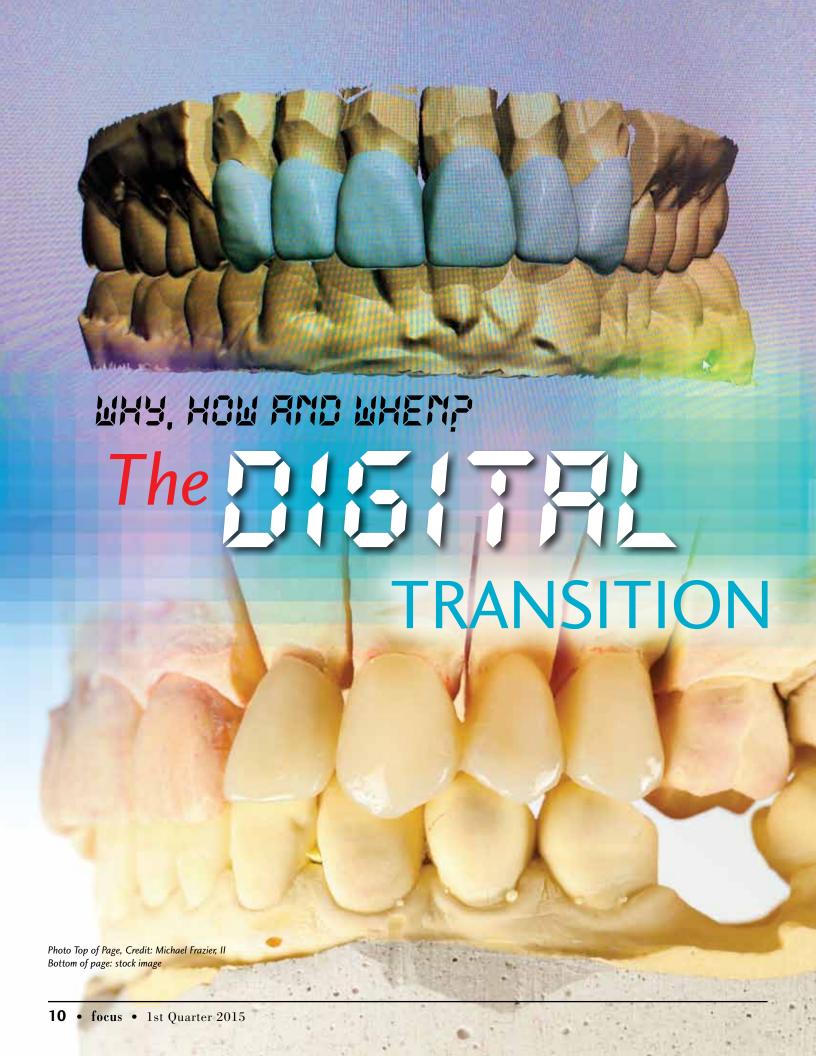


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f you look back at 2008, there were nearly 14,000 dental laboratories in the U.S. Today there are roughly 8,700, according to the NADL. The reasons for the decline in laboratory numbers are many—retirement, business model changes, consolidation. Whatever the cause for the decrease, there is one thing that is certain: Laboratory owners who are not prepared for the digital world today and tomorrow will be the ones left behind in future waves of attrition.

If you haven't already, it is critical to start researching—or, if you're already in the digital arena, to continue to keep up with—the latest manufacturing technologies, equipment, software, materials and technology suppliers today so you can be financially and technologically prepared for the tomorrow.

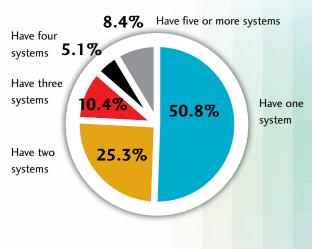
Recently, focus caught up with digital laboratory expert Bernie Jaroslow, CDT, laboratory products manager for Whip Mix Corp., to discuss how dental laboratory owners and managers in Florida can prepare for the digital revolution.

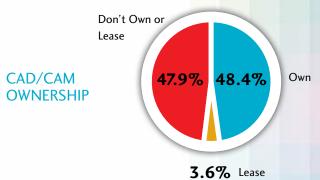
HOW DO YOU KNOW IF SOINS DISITAL IS THE RIGHT MOVE FOR YOUR BUSINESSP

If you are a laboratory owner that is planning for the future of your business, and not for an exit strategy, then a thorough exploration of digital-based manufacturing for your business is essential—no matter what size laboratory you own. Moving into a digital manufacturing business is what will help your business to thrive in the future and will help you stay profitable while getting there. That evolution of your business will help to open new markets, enable you to offer new products and open your eyes to new business opportunities you simply have not been able to take advantage of before.

NUMBER OF CAD/CAM SYSTEMS

More than half of all dental laboratories in the U.S. own or lease a CAD/CAM system. Of those:





Source: 2014 NADL Materials and Equipment Survey

Note: Multiple options may have been available and percentages may not add up to exactly 100 percent.



REASONS FOR NOT OWNING OR LEASING CAD/CAM

35.2%Too cost prohibitive

32.2%Outsource CAD/CAM restorations

23.4%Doesn't fit business model

.8%No time to learn

8.4% Other

WHAT STEPS DO YOU NEED TO TAKE TO PREPARE?

Once you make the decision to introduce digital technologies into your laboratory, preparation is essential to survive the transition. The last thing you want to do is spring the change to digital on your employees at the last second. The adoption of new technologies is, at best, anxiety-producing and, at worst, threatening to existing team members. The fear is that their job security is being threatened. Most laboratories are able to retain their long-term employees by reassigning them to other functions within the laboratory.

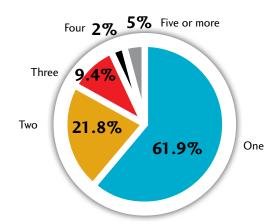
A good example would be a laboratory that is planning to automate their production of burnout patterns by milling or 3D printing. The waxers can retain their jobs by making some changes. Some may be assigned to design on CAD software, some may quality control the digitally produced patterns, some may be responsible for sprucing them, and some may move into

the ceramics department to take advantage of their understanding of anatomy and function. After everything has been explained—and reexplained—to your employees, you will need to reassure those who will be staying.

After the acceptance phase is complete, the training phase will need to start. As we all know, training has always been critical to a laboratory's success and it's even more so when new technologies enter the picture. Recognizing that every technology comes with a learning curve, a comprehensive training program must be developed and instituted well before the first units are made. None of the new technologies are intuitive. Each one requires knowledge that is generally outside the realm of the dental technician's experience. Though someone who understands software can be very helpful, he or she will not be a substitute for a trained technician. An experienced technician with a thorough understanding of design principles should do the CAD work to ensure proper porcelain support and material stability.

STANDALONE SCANNERS

63.1% do not have standalone scanners without internal milling systems. However, those who do, the number of scanners breakdown is as follows:



Source: 2014 NADL Materials and Equipment Survey

Note: Multiple options may have been available and percentages may not add up to exactly 100 percent.

Right: Envisiontech perfactory machine printing crowns. Photo credit: Sharon Dowd



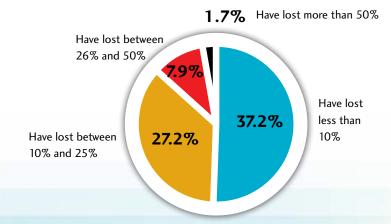
WHAT ABOUT CHANGES TO THE DENTAL LABORATORY BUILDING? WHAT DO YOU NEED TO DO TO MAKE SURE THE TRANSITION IS AS SERMLESS AS POSSIBLE?

This is also an important consideration before you place your order for your first piece of equipment. The physical plant needs to be properly prepared for the new hardware. You will absolutely need an adequate network for your computers and servers, so plan way ahead to have the proper network in place with optimal computers/software. Talk with your IS or IT person to make certain you have everything right because some of the newer technologies require computers with capability well in excess of those for business or home use.

You'll also need to plan where the hardware will be located. Will it fall into an ideal workflow stream? Will your laboratory be lean or will you be wasting time and energy with each case? You should ensure that your stations are properly laid out for the new functions that will be taking place on top of them. Also, keep in mind when deciding on an ideal location of a scan station or mill surface that there can be no possible vibration source sharing common surfaces. Sometimes the smallest vibrations, i.e. pumps, water coolers, etc., can interfere with a good scan or the accurate milling of units.

BUSINESS LOSS DUE TO CLINICAL IN-OFFICE CAD/CAM

74.1% of dental laboratory owners say they have lost business because of clinical in-office CAD/CAM, which breaks down to:





DIGITAL COMMUNICATION

Of those who own or lease a CAD/CAM system:

67%

Use a digital communications network to communicate with dentist clients

38.2%

Say this network improved their business

28.8%

Say the network had little to no impact on their business



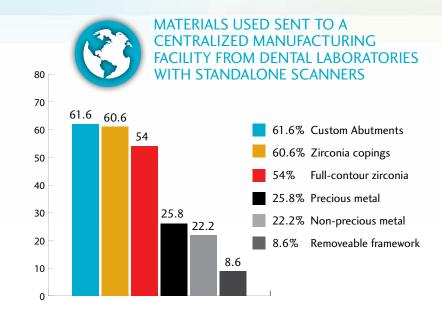
WHO DESIGNS UTILIZING STANDALONE SCANNERS



Train in-laboratory technicians to perform new tasks



Hire new employees with no previous dental technology experience



Source: 2014 NADL Materials and Equipment Survey

Note: Multiple options may have been available and percentages may not add up to exactly 100 percent.



3D PRINTERS

Nine out of ten laboratories surveyed do not have a 3D printer. However, those that do the number of 3D printers per laboratories breaks down to:

60.7%

One

19.7%

Two

9.8%

Three

6.6%

Four

3.3%

Five or more

Source: 2014 NADL Materials and Equipment

Survey

Note: Multiple options may have been available and percentages may not add up to exactly 100 percent.

HOM DO YOU IDENTIFY MHRT IS THE RIGHT TECHNOLOGY FOR YOUR BUSINESS MODEL? SHOULD YOU RE-EVALUATE

SOINS DISITAL?

First, you need to decide where you want your laboratory to be headed. If there is planned obsolescence or you are by nature a risk-averse person, then you are probably best off to just get a scanner and outsource your files to a milling or printing center. This will prevent you from having to spend too much in capital equipment dollars, vet allow you to take incoming intra-oral scans and provide your accounts with accurate, longlasting restorations. This approach will enable your business to survive what could be a very rocky business future for laboratories that simply won't take that leap of faith.

If you see a long future for your business, your plan may be different. It may involve onsite digital fabrication of the restorations, where you may be looking at high initial investment dollars, but ultimately higher productivity and higher profitability. Your ROIs (return on investments) should be short and sweet so your laboratory will continue to grow and really thrive in the digital landscape, not merely survive.



THE BEST PARTNER FOR YOUR

The best partner for you is not the company that offers you the best price. The best and only company for you is the one that offers you the best hand-holding customer and technical support service. The challenge you have is to transition your business without stumbling and the only way to do that is to have the right people at your side, taking care of the many details with which you may not have experience. Unless you are in an extremely small minority of laboratory owners, you most likely do not have experience with the lines of computer code that determine the milling or printing strategies you'll need to optimize your production. Find the people who do. Talk with other business owners who have been through the transition and see what their experience has been with companies that sell digital equipment. You want one that is dedicated enough to you and your business that they make you feel like you are their only customer, or at least their most important customer.

HOW DO YOU DETERMINE THE BEST EQUIPMENT AND WORKFLOW?

The best equipment for you enables you to increase your production, enhance your work flow, save on costs and can be paid off to start your true profits in a reasonable amount of time. Of course, that length of time may vary depending on your laboratory's size and your business plan/model. In most cases, in the beginning of your journey, you would purchase a dependable scanner with scanning and CAD software. There are several good ones available, though the one that seems to stand out among the list is the 3 Shape scanner group. There are several models to fit your laboratory's needs, with extreme accuracy,

lots of software options and a continuous upgrade program that allows you to stay current. In addition, though there is a slight learning curve, they are pretty intuitive so even a beginner will have a relatively easy time acclimating to 3D design manipulation.

In addition, there is now an intra-oral scanner for dentists to use for digital impressioning. That is very important because those files will be sent directly to the laboratory to make the models, temporary crowns, and ultimately the final restoration. If you are not an intra-oral scanner-ready laboratory, the work goes elsewhere. Obviously, that would be your worst nightmare—especially if it's a great account that pays on time. This scenario is starting to be played out all around the dental world. You have to be ready when that call comes.



DIGITAL IMPRESSION SYSTEM NUMBERS

Of those dental laboratory owners who have digital impression systems, the number of systems owned or leased breaks down to:

59.6%

One

27.7%

Two

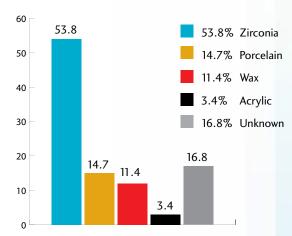
4.3%

Three

8.5%

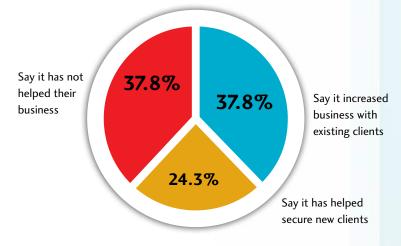
Four or more

CAD/CAM RESTORATIONS BY THE BLOCK



DIGITAL IMPRESSION SYSTEMS PROS AND CONS

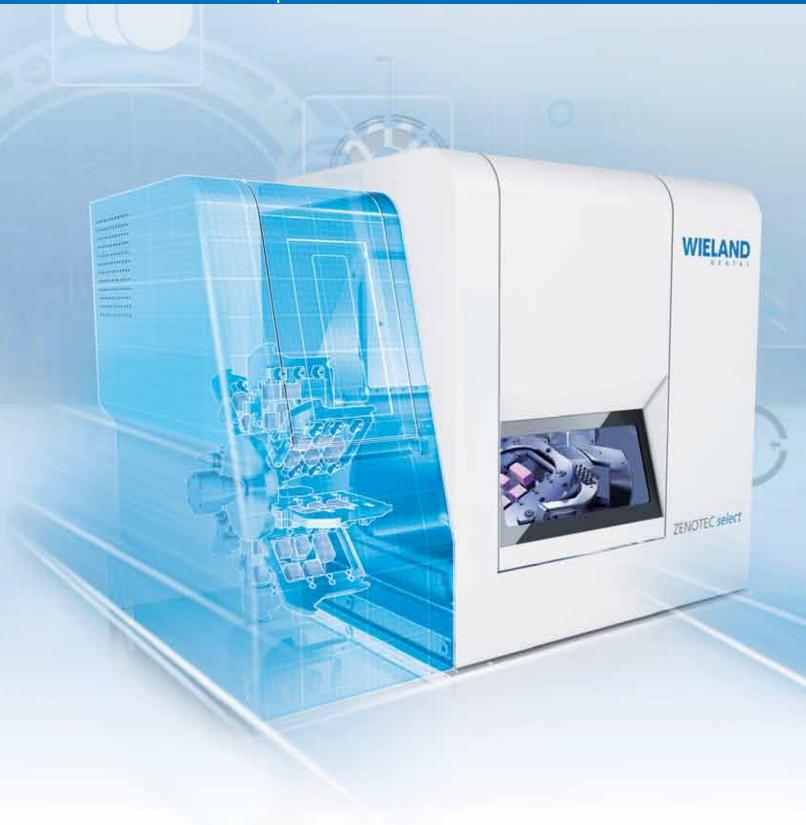
Nine out of ten dental laboratories do not have a digital impression system. However, of those that do:



Source: 2014 NADL Materials and Equipment Survey

Note: Multiple options may have been available and percentages may not add up to exactly 100 percent.

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passion vision innovation

Perfecting Dental Treatments

via 3D Printed Models and Removable Dies

By Avi Cohen, Director of Global Dental, Stratasys

he art and science of dentistry have evolved significantly over the past few years as clinical and laboratory workflows have progressed from an analogous, manual manipulation of materials to a systematic, digitally verifiable process. Today, these digital processes are being embraced as a means of elevating the total quality of dental offerings so that patients may benefit from enhanced treatment procedures; clinicians can treat patients faster, more smoothly and with greater consistency; and dental labs can provide dependably superior products. The case study presented herein illustrates the ease of utilizing consistent and reproducible 3D printed verification protocols as a means of ensuring the success of the restorative treatment plan.

Figure 1 (right) Pre-op photo.



Figure 2 (below)
Crown preparation of tooth No. 30.



Forward-thinking dental professionals, clinicians and laboratories are actively pursuing emerging digital dentistry technologies and quickly realizing the benefits. These advancements have yielded new, high-quality materials that are industrially pre-fabricated, tested and controlled, as well as a standardized process for the creation of exacting treatment solutions, both of which help the dental professional construct dental devices of higher quality and consistency.

Traditional ways of creating dental casts have multiple opportunities for discrepancies. Technique, material behavior and material properties can generate substandard results. And because techniques are individualized, noteworthy discrepancies can be seen from day to day, and person to person. Traditional materials exhibit expansions and shrinkages that are challenging to counterbalance and often difficult to control. These discrepancies prevent validating the cast within the oral cavity, potentially making the dental treatment stressful for both the clinician and the patient, since more chair time is necessary to address issues related to fit.

3D imaging software and 3D printed dental casts constitute the foundation of digital dentistry. With them, dental professionals are able to follow a

controlled verification process that duplicates the topography of the intra-oral cavity precisely so that the actual seating of the device is fast and anxiety-free.

Finally, by employing digital dentistry technology, dental laboratories can accurately and rapidly produce a range of dental and orthodontic appliances, eliminate the bottleneck of manual modeling, and help the lab grow and stay ahead of the competition.

The removable die is an important component of the model system. Previously, dies were cut out individually to gain access to the prepared margin and accurately fit the restoration inter-proximately. This process was time consuming and often imprecise. The use of 3D printing helped address these issues but new challenges arose. While CAM software could segregate the dies from the main cast and print them separately, a large mass of dies were generally printed on one tray at the same time. These dies then needed to be cleaned, labeled and matched to each specific model. Furthermore, this method produced a slight horizontal shift or inconsistency in the die socket which frequently led to discrepancies in the final fit.

For these reasons, Stratasys set to work rethinking the printed model. A simple manipulation within the CAM software now allows the preparation to be duplicated and the removable die to be attached to the external cast, which can be used for verifying the margin. Additionally, now that the removable component has been eliminated within the un-sectioned solid cast, there is no potential for horizontal discrepancy shifts in fit.

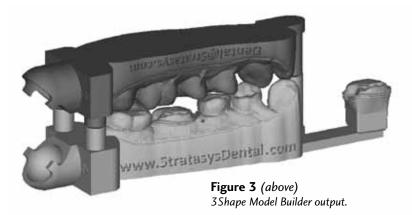




Figure 4 (above) Designed restoration.

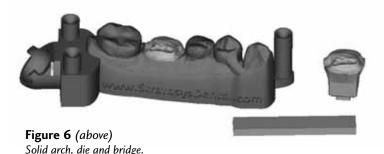
Case Study

A patient presented worn dentition, defective amalgam fillings and visible cracks in the molar regions (**Figure 1**). The patient, a bruxer, requested a conservative treatment rather than a full-mouth reconstruction to rebuild lost vertical dimension. A treatment plan was proposed to replace the defective amalgams with tooth-colored direct composite fillings, and place full-coverage zirconia LavaTM Plus (3M ESPE) crowns where needed. Full-contour zirconia was chosen for the full crown material based on its strength, minimal reduction requirements and its ability to provide the desired tooth-colored appearance.

Treatment began on the mandibular lower right quadrant. Teeth Nos. 28, 29 and 31 received new composite fillings. A composite core was placed in tooth No. 30, and the tooth was prepared for a full-contour zirconia crown (Figure 2). The gingiva was retracted to reveal the margin for the digital impression. Itero® (Align Technologies) was used to scan the operative quadrant, the opposing arch, and finally, the patient's bite. The resulting digital proposition produced a virtual cast for evaluation of complete capture of data and an accurate rendering.



Figure 5 (above) Solid arch and die.



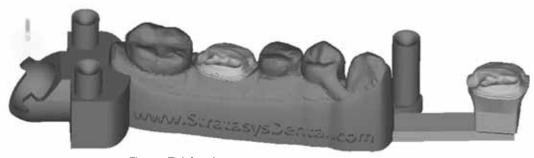


Figure 7 (above)
New solid arch.

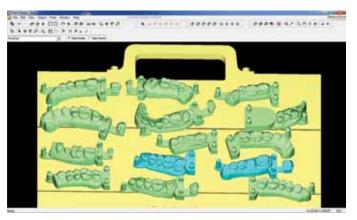


Figure 8 (above) Print job.



Figure 9 (above) Restoration placed.

An open-formatted STL scan file from Itero was imported into the Dental ManagerTM (3Shape) CAD software. Dental DesignerTM (3Shape) software was used to annotate the location of the proposed crown for tooth No. 30, and both a sectioned cast and un-sectioned cast. Model BuilderTM software (3Shape) was used to reorient the scan data, set the plane of occlusion and identify the prepared tooth's margins. Additionally, it proposed bases for both arches and a separated die was virtually extracted from the arch. STL files were generated for each cast part accompanied with an operative arch, opposing arch and an un-sectioned model with attached die (Figure 3). The crown was designed with 3Shape design software (Figure 4), then milled and sintered overnight according to the material manufacturer's recommendations.

This innovative solution for a solid model—including a detached die and opposing arch—was generated, even though current Model Builder software does not support this solution automatically. The solid arch and detachable die were loaded into an industrial CAD software program (Figure 5). A small rectangular shape was created and used to bridge the space between the solid arch and the detachable die (Figure 6). The three individual shapes were combined into one file (Figure 7) and sent to an Objet® Eden260VTM 3D Printer (Stratasys®) along with other casts (Figure 8).

Once sintered, the crown's margins were easily finished on the printed detachable die, and contacts were subsequently fitted to the solid model, thereby providing validation of the device while still in the lab. The crown was then stained, glazed and advanced to the clinician for seating. In the dental office, the Lava Plus zirconia crown was received from the dental laboratory and evaluated again on the model. The fit of the crown on the detached die was perfect, with no rock or rotation, and the margins were undetectable. Interproximal contacts were validated on the solid model as broad and firm. Minimal



Earn continuing education credits for this article and quiz!

Receive .5 hours CDT/RG scientific credit and .5 hours general credit towards your state of Florida dental laboratory renewal by reading this article and passing the quiz. To get your credit, complete the quiz located on the FDLA website at www.fdla.net using the *focus* Magazine link. Once you have completed the quiz, fax it to FDLA at 850-222-3019. This quiz is provided to test the technician's comprehension of the article's content and does not necessarily serve as an endorsement of the content by FDLA.

adjustment was required and the crown was bonded with ScotchbondTM Universal with RelyXTM Ultimate Adhesive Resin Cement (3M ESPE) (**Figure 9**). This verification protocol was utilized systematically in the laboratory, and then subsequently in the dental office to produce a superior, verified and consistent dental treatment.

As shown in this case study, the innovative cast CAD/CAM method ensures accuracy and precision by confirming the fit of the crown in the patient's mouth, before it leaves the dental lab. All horizontal inconsistencies, which previously led to chair-side adjustments, have been alleviated by using a new verification protocol with the detached die for margin finishing, and the unsectioned solid model for contacts.

Digital dentistry is rapidly becoming the norm within the profession, and serves as a valuable business tool for dental laboratories by cutting production times, lowering labor costs, and increasing efficiency, accuracy and profitability. What's more, digital dentistry offers dentists the use of consistent, state-of-the-art dental devices, and their patients a superior healthcare experience. •

About the Author:

Cohen is director of global dental at Stratasys.

focus Needs Your Articles

What type of articles is FDLA's focus magazine looking for?

Technical Articles:

The 1,000 to 1,500-word article should be case specific and engage the intermediate- and advanced-level technicians. It should take an objective and critical look at cutting-edge technologies and new techniques. The article should not only give step-by-step information on how to do something, but provide insight on the why and the how a particular technique or product works.

Photo Technical Articles:

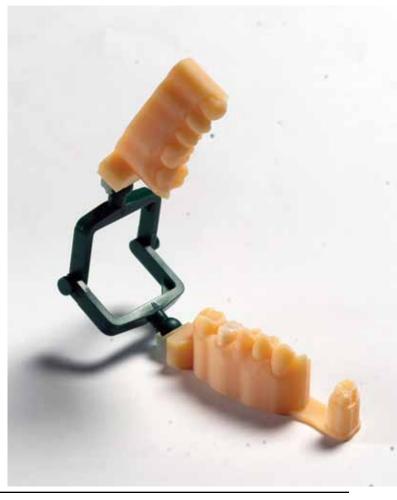
This case presentation article will feature before and after photos with several photos highlighting the work done to create the final restoration. The photos should be accompanied by a short (one or two sentence per photo) explanation of what is happening in each photo as well as an introduction setting up the case and conclusion explaining how the final results were accomplished.

Interested? Contact *focus* Editor Cassandra Corcoran at cassie@thewritemessage.net for more information or to submit your article.



Figure 10 (above)
Printed dental model with a non-removable die.

Figure 11 (below)
Printed dental model using VeroDentPlus™ material.



Training Tomorrow's Technicians

By Cheryl Odle, CDT

he Indian River State College dental laboratory program is the only degree granting, Commission on Dental Accreditation accredited dental laboratory technology program in the state of Florida and offers a two-year associate of applied science degree in dental laboratory technology. Indian River is one of only 17 accredited dental technology programs nationwide.

We have tailored the program to enable students to commute from outside the four county collegewide area. Indian River State College is always looking for students for the program, including working dental technicians who want to enhance their skill base. The program is also looking for part-time faculty as well as students who would like to help teach the next generation of technicians. In addition, the program is searching for local laboratories who are willing to let students intern or job shadow at their laboratories.

This program is a selective admissions program, meaning the class size is limited and there is an additional application besides the application to the college. Indian River accepts one fall class of

15 students each year. We have tailored the program to enable students to commute from outside the four county college-wide area. Each class, first and second year, will be in the labs on the main campus two consecutive days per week from 8 a.m. to 5 p.m. for the core dental laboratory technology courses.

Right now, Indian River State College is looking for an adjunct professor who is a CDT or CDT eligible and has at least an associate of applied science degree in dental technology. The adjunct professor will help teach all of the main areas in dental laboratory technology to students:

- Complete dentures
- Partial dentures
- Orthodontics
- Full cast crown and bridge
- Implants
- Ceramics

Indian River State College rounds out the education with dental materials, oral anatomy, occlusal topography, tooth physiology and morphology, dental laboratory operations, ethics and jurisprudence. There are general study curriculum courses which may be taken at any branch campus, other institutions closer to home and transferred in, or taken online.

Find out more about Indian River State College on its website (www.bit.ly/1GLp7ZR). •

About the Author:

Odle is the Indian River State College dental technology program chair. You can reach her at codle@irsc.edu or 772-462-7522.



A recent Indian River State College graduating class (from the bottom left): Department chair Cheryl Odle, CDT, Jasmine Fantini, Anna Fantini, Glenn Lewin, Heather West, Brian Campbell, Florita Robinson, Barbara Abelhauser, James Kraver, Pamela Clothier, Kristopher Horn and Lindsey Nolan.

Equipment and Material Donations Needed

Like many dental technology programs across the country, Indian River State College is looking for equipment and material donations from manufacturers, suppliers and dental laboratory owners. If you'd like to make a donation, please contact program chair Cheryl Odle, CDT, at codle@irsc.edu or 772-462-7522. The program will accept any usable item for student learning, but in particular, the school needs:



Lab putty Investments Porcelain Acrylics Waxes

Gypsums

Implant components (and impressions or models to work on)



Above: Indian River Si College student Sixta Flores.

Equipment needs:

Steam cleaner
Porcelain furnaces
Multi-stage programmable burnout furnaces
Pindex machines
Ultrasonic cleaners
Laser welder
CAD/CAM system
Flexible partial denture acrylic system
Eclipse system



Visit the Indian River State College website at www.bit.ly/1GLp7ZR



Left: Indian River State College students Josef Greenberg, Shari Baynes and Angela Neugebauer

FDLA MEMBER BENEFITS

Your membership in the Florida Dental Laboratory Association (FDLA) will bring you a return many times greater than your investment. The association's proven programs provide members with the tools they need to operate their businesses successfully.

Education

As the leader of dental laboratory technology continuing education within the state of Florida, we are committed to helping laboratories formulate a business that will grow, meet the requirements mandated by Florida law and help Certified Dental Technicians (CDT) and Certified Dental Laboratories (CDL) maintain their certification. FDLA members are eligible to receive discounted rates on all continuing education.

- **District Clinics** Rotating around the state of Florida, FDLA District Clinics offer laboratory owners and technicians/staff the opportunity receive continuing education credits year round on a variety of topics including the required "Florida Laws and Rules for Dental Laboratories" course.
- Online Education FDLA offers online education, including the mandatory "Florida Laws and Rules for Dental Laboratories" course, on our Web site www.fdla.net.
- Southern States Symposium & Expo presented by FDLA As the largest not for profit dental laboratory meeting in the country, attendees have an opportunity to meet with vendors of dental laboratory products/services to discuss equipment, supplies and techniques that can improve their business. A wide range of technical clinics are scheduled to provide members with the most current industry standards and continuing education.

FDLA Scholarship

The FDLA Scholarship supports educated or trained dental technicians who are working toward certification through the National Board for Certification in Dental Laboratory Technology's (NBC) Certified Dental Technician (CDT) Program. FDLA will present up to four \$500.00 scholarships each year at the Annual Awards Luncheon in conjunction with the Southern States Symposium & Expo, presented by FDLA. The scholarship may be used to offset the expenses of CDT study materials purchased through the NADL Fulfillment House (Visual Reference Guide or Air Force Manuals) or application and testing fees for the CDT exam.

Legislative/Government Relations

FDLA works with several agencies to modify and strengthen existing laws affecting dental laboratories and ensure that such regulations strike a balance between patient safety and ease of compliance. FDLA members are provided critical updates and reminders for important legislation, deadlines and regulatory alerts.

- Florida State Laws Affecting Dental Laboratories Manual FDLA has developed a manual defining the state laws affecting dental laboratories. This manual explains in detail: continuing education, data required on prescriptions, materials disclosure and point of origin requirements necessary with all communication and case work executed between the dentist and laboratory.
- Continuing Education Requirement The state of Florida mandates that each laboratory in Florida must receive 18 hours of Florida approved continuing education credit every two years. FDLA is an approved provider and offers a variety of courses – including the mandatory course on "Florida Laws and Rules for Dental Laboratories."

Communication

- focus Magazine − FDLA's quarterly focus Magazine is the most widely read state dental laboratory association publication. It provides updates on crucial industry information, new technology, laboratory management and other issues of vital concern. FDLA members receive a complimentary subscription as part of their membership.
- **Web site** FDLA's Web site, www.fdla.net, has comprehensive information on pertinent industry updates as well as conference registration forms, an online directory that enables dentists to look up FDLA member laboratories and other links.

Business Services

(available to laboratory members)

- FDLA Insurance Services FDLA is proud to offer special rates for laboratory members for Group & Individual Health & Dental, Disability Income, Employment Practices Liability (EPLI), Office overhead expense, Term Life & Long Term Care, Workers' Compensation, Pension & Retirement Plan, Fidelity Bond and Auto & Home Insurance.
- Human Resource Hotline The average dental laboratory does not have the workforce or means to hire a human resources manager. Even larger laboratories that have a human resources manager may need some advice on tough situations from time to time. FDLA members receive human resources telephone consultation services FREE OF CHARGE!
- Credit Card Payment Processing FDLA member laboratories are eligible to receive discounted rates on credit and debit card processing. Our provider specializes in creating card acceptance programs specifically for the dental industry.



Florida Dental Laboratory Association Membership Application

All memberships are individual memberships and only cover one person.

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The Hub

FDLA's Sarasota District Workshop a Success

On January 16, the Implant Esthetics Center of Excellence in Sarasota, Fla. hosted FDLA's district workshop, *Simple Esthetics featuring IPS e.max*®, presented by Jeffrey Smith, III, CDT.







Above, left to right: Luis G. Barros, CDT; Gina Barros; Linda Diamond; Tim Kuser, CDT; Daniel Wade; Steve Mueller, CDT; Jeffrey Smith, III, CDT; Jeffrey Kocher, CDT; Pete Smith, CDT; and Carl Dohne, CDT.





District Business Partners

These companies support the Florida Dental Laboratory Association in our vision to advance the individual and collective success of Florida's dental technology professionals in a changing environment. They are FDLA's Business Partners, and have pledged their support to Florida's dental laboratory profession.

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March 6

Esthetic Realities for Today and Tomorrow Peter Pizzi, CDT, MDT, FNGS Four Hour Lecture for Doctors And Technicians

March 7

Esthetic Realities for Today and Tomorrow Peter Pizzi, CDT, MDT, FNGS Hands-On Workshop www.fdla.net



For more information visit www.fdla.net

Classified Line Advertising (print and online opportunities)

Classified Line Ads are \$125 (members) and \$175 (non-members) for the first 50 words, and \$.25 for each additional word. Ads will run in one issue of the publication and on FDLA's website for one quarter.

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From Front Office to the Bench

K

hadija "K" Adams, CDT, started her career as an administrator, but when she was asked to go to dentist offices to look at patients, she got hooked on being a dental technician. She has been in the dental laboratory business for more than 21 years, and owns her own laboratory, KLA Dental Laboratory.

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.

How did you get started as a dental laboratory technician?

In 1982, I started as an administrator for a laboratory. I would go out and look at patients, and I loved what I was doing. At the time, the laboratory was owned by a family. I just jumped in, going from one job to another. I was an administrator then I worked in model and die, and then I worked wherever I was needed. Later, my boss and two other people built their own laboratory. We went through five or six managers, but that laboratory could not survive. I decided to get out of it and see what I could do on my own.

I work out of my house. I built a little lab in the back. It's really cute. I do have a scanner, and I did market myself as having the technology, but the dentists are not really interested, especially with the offers they are getting from big laboratories. Right now, I have two accounts. The main one is an old-school kind of dentist, which I like.

Describe your ideal dentist client.

I love to communicate with my dentists. I like to visit the office, I like to get to know the patient, visit with the office staff. The interaction with the dentist, the patient, the office is what I really love. My client and I have been working together for so long it's almost like a family. I understand what his needs are, what he likes and what he doesn't like. We built that connection. We can work with each other with not too much trouble. Ideally, you want the dentist to be a quality practitioner. I like that the patient is being taken care of and being considered. I am a one-person lab, and I make all the pick-ups and deliveries. It's really important to me to know my dentists.

What is the hottest thing in dental technology right now?

Implants have really taken off, especially with laboratories not having to have an inventory. The costs have gone down a lot. Not all patients can afford to do that. Instead of having an implant they have a denture, as well as partials.

"I like to get to know the patient, visit with the office staff."



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