Cosmetic Dentistry Evolves with a Changing Economy
Strength. Made perfect by Beauty.

Choose Zirlux FC full contour zirconia to bring beauty to your high strength cases

- High translucency pre-shaded zirconia
- All-ceramic alternative to gold
- Increase profitability over metal restorations
- Low wear to opposing dentition

Become a Certified Lab! Visit us at www.zirlux.com

For more information on this or any of our products call us 1-800-496-9500.

© 2012 Henry Schein, Inc. No copying without permission. Not responsible for typographical errors. 12ZS6312
Opportunities Ahead

“We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next 10. Don’t let yourself be lulled into inaction.”

— Bill Gates

Bill Gates is definitely an individual who knows how to put forth action to create change. A little something we’re familiar with in the dental laboratory world. For example, there has been a significant change from PFM to all ceramic. In this issue of focus, you will be provided relevant information about the growth of the all-ceramic product to better inform you and help with your decision making in regards to this product. In short order all-ceramic products has had a profound impact on our profession and we should not underestimate the change that will occur in the next 10 years. Take the time to study your options, determine where the trends for growth are and act upon your decisions.

One area that is remaining stable even in a down economy, in my experience, is the high-end cosmetic restoration. This line of work takes individuals who are committed to their success and in turn they are reaping the rewards. Being the best takes much preparation and putting in the time to be proficient to do the work. This will allow you to brand yourself within your profession. Inside, you will be able to read a story about how about high-end laboratories are doing just that.

We just started a new year which gave many of us a new opportunity to start new goals or to set out to accomplish old goals that were not quite completed. Our world, as Thomas Friedman said, is continuing to become flat. Remember the lesson to continue to learn how to learn. We have to continue to stay on top of the trends to remain relevant in our profession. As I have said in the past, take the time to plan and then execute the plan. Make sure to attend the symposium on May 9-11 at our new location: Renaissance Orlando at SeaWorld. We are projected to have one of our best educational line ups ever.

I want to add one belated New Year’s goal to your list. Henry Ford said, “coming together is a beginning. Keeping together is progress. Working together is success.” I would like everyone who wants to improve their working relationships and increase their successes with their dentists to invite them to this year’s symposium. Make this your best year ever!

By Eric Wade, CDT
FDLA president
6  The All-Ceramic Restoration Advantage

All-ceramic crown and bridge restorations fabricated with CAD/CAM technology are predicted to grow from 40 percent of overall ceramic unit share to almost 70 percent in 2015.

10  Before and After

Cosmetic dentistry is evolving with the changing economy. However, even in trying economic times, some cosmetic-focused dental laboratories in Florida have found ways to stay competitive and reach their goals.

20  Bring in the Light

Peter Pizzi, CDT, explains how to utilize Lava™ Plus High Translucency Zirconia for improved translucency.

24  Training Today’s Younger Workforce

On-the-job training continues to be one of the most common training methods for dental technicians. Discover training options that you can implement at your laboratory.

26  The Hub — Get the latest industry news.

28  Zero In — Plan your continuing education calendar.

30  Focal Point — Lenny Herrera, CDT, of The Surveyor Dental Arts, Inc.

Advertisers Directory

Atlanta Dental ............................... page 28
www.atlantadental.com

The Argen Corporation .............. Inside Back Cover
www.argen.com

Aurident, Inc. ......................... Outside Back Cover
www.aurident.com

Aspen Dental ......................... page 22
www.aspendental.com

Dental EZ ................................. page 5
www.dentaie.com

Heraeus Scrap Refining .............. page 9
www.heraeus-scrap.com

Ivoclar Vivadent, Inc. ............... pages 16 -17
www.ivoclarvivadent.com

Nowak Dental Supplies ............. page 15
www.nowakdental.com

Safelink Consulting .................. page 8
www.safelinkconsulting.com

Southeastern Conference of Dental Laboratories .......................... page 23
www.scdl-online.org

U.S. Dental Milling .................... page 25
www.usdentalmilling.com

Zahn Dental Lab Division .......... Inside Front Cover
www.zahndental.com

Cover Photo Credit (Restoration only):
M. Johnson Hagood, DDS, AAACD, TAGD
ErgoEZ™ Lab Bench

- Dependable steel construction, powder coated finish
- Solid work surface
- Adjustable arm rests that move side to side
- Variable speed dust collector with automatic or manual settings
- Personal bench height options of 30", 32", and 34"
- Optional LabPro™ brushless handpiece system

Built the way you want.
For several decades, the systems used to manufacture all-ceramic dental restorations have drastically improved the ability to restore the natural look of teeth. Patients have begun asking for all-ceramic restorations and, as a result, more laboratories are being asked to move in that direction.

Jason DeFranco of TLC Dental Laboratory in Orlando has seen a significant increase in all-ceramics. "In the last two years, we’ve gone from 20 percent to 70 percent," he said. "They are esthetically pleasing, easier to handle and there is less margin for error. It’s easy to make money with all-ceramics."

All-ceramic crown and bridge restorations fabricated with CAD/CAM technology are predicted to grow from 40 percent of overall ceramic unit share to almost 70 percent in 2015, according to Millennium Research Group. The company predicts the global dental CAD/CAM system market will grow strongly to reach a value of more than $540 million by 2016.

"Of the materials used to fabricate CAD/CAM restorations, high growth over the next five years in all-ceramic restorations will mainly stem from the segment of newer and alternative materials such as lithium disilicate. Lithium disilicate, a glass-based ceramic, is gaining popularity due to its proven durability by monolithic structure, withstand greater force than zirconia restorations with similar high esthetic properties," the company states.

The direct ceramic machining (DCM) process is familiar to most in the industry because of its ability to easily, reliably and rapidly manufacture all-ceramic dental restorations with high mechanical strength and good biocompatibility. With DCM, an enlarged framework is milled out of a pre-fabricated porous ceramic blank made of zirconia. After sintering to full density, no further time-consuming hard machining with diamond tools is needed. For individual esthetic requirements, the framework is coated with a veneer porcelain. However, there are areas of concern.

"Ceramic materials are evolving with higher strength and increased translucency to provide improved esthetic restorations. Silica-based ceramics offer the most esthetic option, whereas zirconia ceramics provide the highest strength," according to The Dental Advisor. "Full-contour, monolithic ceramic restorations are rapidly improving in their ability to mimic the esthetics of natural teeth. Lithium disilicate restorations have become the preferred material due to their durability and esthetics. However, they are more expensive than other materials. The choice of material ultimately depends on the patient’s budget and the dentist’s preference."
Growing in popularity, replacing ceramic-metal and layered ceramic restorations.”

Laboratory technicians must consider several important factors when selecting an all-ceramic material. Esthetics and strength should be among the top components to consider when choosing. Still, versatility is crucial and investing in one system that could provide inlays, crowns and veneers is a reasonable solution for many laboratories.

However, DeFranco recommends that a transition to all-ceramics shouldn’t be made in a laboratory unless it’s running efficiently.

“Bottom line, you need a lean lab, otherwise ceramics are tough to implement because there’s a bit of a product mix shift with DCM,” he said. “You have to be ready to train employees and accept a learning curve during the conversion period. The start-up costs and training period can be frustrating. It’s a big decision and requires full cooperation from everyone.”

The dentist and technician have to be equal partners in the desire to deliver a quality all-ceramic restoration because precise attention to detail in tooth preparation, cervical margin design and location, soft-tissue management and impression making is crucial to success. Additionally, proper selection of materials and shade-matching are crucial.

Recent advancements in all-ceramics increasingly make it an appealing choice. Options now include pressable porcelain, porcelain to zirconia, CAD/CAM restorations and sub-classes of each that continue to be developed by many different manufacturers. Demand for all-ceramic restorations is expected to continue to grow. Additionally, new digital dental technology allows for instant feedback between the dentist and laboratory increasing the probability of all-ceramic usage.

With so many all-ceramic choices, it’s essential to become educated about each system or at least the top systems that make sense for your laboratory.

“I believe things will keep going and we’ll see usage get to 90 percent,” DeFranco said about the future of all-ceramic restorations at his laboratory.

**Trends in Ceramics**

As materials evolve, there is a continual push toward a strong yet esthetic restorations. Silica-based ceramics offer the most esthetic option, where zirconia provides the highest strength. Some companies (3M ESPE, Ivoclar Vivadent) have married a zirconia coping with a ceramic overlay, producing a strong core with an esthetic overlay. It is clear that the dental industry is moving toward a more monolithic restoration. As such, newer full-contour zirconia crowns and bridges are being manufactured, offering higher translucency and combined with high strength. While IPS e.max continues to dominate the all-ceramic market for posterior crowns, full-contour zirconia restorations are growing in popularity due to lower cost, higher strength, and minimal preparation.

**Ceramic Choices**

- **Feldspathic:**
  Highly translucent and esthetic ceramic used most commonly for veneers. Lowest strength ceramic, ranging from 70-110 MPa.

- **Leucite-Reinforced (IPS Empress Esthetic, Cerpress SL):**
  Excellent esthetics and translucency. The addition of leucite crystals to the glass matrix slightly improves mechanical properties. Ideal for veneers, inlays/onlays, and anterior crowns.

- **Lithium Disilicate (IPS e.max):**
  Composed of a glass matrix filled with 70 percent lithium disilicate crystals, resulting in a material that is relatively translucent and two to three times stronger than leucite-reinforced ceramics. It is a universal material that combines strength and esthetics and can be used for veneers, inlays/onlays, and anterior and posterior crowns.

- **Zirconia (Lava, Crystal, BruxZir):**
  Highest strength ceramic with highest fracture toughness due to the composition of polycrystals. The lack of a glass component within the matrix results in an opaque restoration, compromising esthetics in some cases. Its use is indicated for anterior and posterior crowns, three to six unit bridges, Maryland bridges and implant abutments. Newer zirconias have improved translucency.

- **Resin Nano-Ceramic (Lava Ultimate):**
  Newest class of CAD/CAM materials. The ceramic block is infused with resin resulting in a material that is easy to mill, requires no firing, can be easily repaired and adjusted, and does not wear the opposing dentition.

Source: The Dental Advisor (www.dentaladvisor.com)
HazCom Training Toolkit
OSHA-Revised Hazard Communication Standard

The HazCom Training Toolkit is your easy solution to complying with OSHA’s revised Hazard Communication Standard. In March 2012, OSHA adopted certain components of The Globally Harmonized System of Classification and Labeling of Chemicals (GHS). This revised Standard requires businesses to add global symbols for identifying hazardous products used in the workplace and use of a standardized 16-section format for Safety Data Sheets (SDSs). With the HazCom Training Toolkit you’ll get the components needed to help meet these new requirements along with an employee training video and employer instructions. Contact SafeLink Consulting today to order.

- Assists in meeting OSHA’s revised Hazard Communication
- Educates in understanding the new classification, labeling, universal symbols and standardized safety data sheet
- Provides OSHA-required training to your employees
- Includes easy-to-follow employer instruction for
  - OSHA’s Revised Hazard Communication Standard
  - Employee training presentation on CD
  - Explanation of Globally Harmonized System
  - Pictogram Labels
  - Training Test and Certificate
  - Training Checklist and Employee Training Register
- Professionally developed by industry’s top safety consultants

SafeLink Consulting Inc.
“Your turn-key solution to safety & quality programs”
770.205.6745 • 1.800.330.6003 • www.safelinkconsulting.com
Your key to higher returns. Refine direct with Heraeus.

If you want the best return on your scrap metal, go to a direct refiner – go to Heraeus. We heat, melt, separate, then analyze your precious metals in one location to give you the highest return possible. We eliminate the middle man, surprise fees and minimum lot charges to bring you the highest return. Get the most from your scrap by going direct to Heraeus – the world’s largest private refiner.
The economic recession has impacted the dental laboratory industry mainly because many patients view dental work as elective, which makes it the easier choice for consumers to put off. Cosmetic dentistry, in particular, has faced the biggest decline, seeing a 13 percent drop since 2007, according to the American Academy of Cosmetic Dentistry (AACD).

A thriftier customer has emerged, which means that businesses offering cosmetic procedures feel pressure to adjust to a value-driven retail market. This shift in consumer behavior requires facing new realities. However, even in trying economic times, some cosmetic-focused dental laboratories in Florida have found ways to stay competitive and reach their goals.

Rachel Powledge, of Suncoast Ceramics in Brandon said the laboratory has felt the pressure of a changing market.

“Everyone at Suncoast has had to make sacrifices to make it through this tough economy,” she said. “As a group, we temporarily did away with paid vacation time, paid sick days and some paid holidays. But the economy kept falling, so we took pay cuts and shortened our workweek from five days to four days so that jobs could be kept. It’s been three years now.”

Gagliano Dental Lab, based in Tampa, has weathered the storm by focusing like a laser on quality.

“I haven’t really changed anything about my business or lost any accounts since the recession,” said owner Jim Gagliano, CDT. “Dentists are definitely seeing fewer patients, though, and the flow has certainly slowed down.”

Even in a down economy, there are things that dental laboratory owners, whether they focus on cosmetics or not, can do to create growth. Howard
Shore, a business coach with the Miami-based Activate Group, Inc., cites seven commonalities successful business owners share that can accelerate growth in a down economy. They are:

1. **Planning** — Have and execute a written business plan.

2. **Core Customer** — Identify your most profitable and loyal customers. Focus on those customers who will most likely buy your product or services in the quantity required for optimal profit.

3. **Differentiate** — Make sure that your company has an uncommon offering that is targeted toward your core customer that your business will own and leverage.

4. **Invest in Your Sales Force** — Get rid of your C players immediately. Invest whatever it takes to train and develop your A and B players to peak performance.

5. **Improve Hiring Process of Sales Force** — Most companies do a very poor job in hiring salespeople. This costs companies a lot of money on the top line.

6. **Find Top Talent** — Evaluate every employee at least once a year. Get rid of your mediocre employees, and figure out which of your good employees can be developed into great employees.

7. **Marketing** — Great advertising and public relations is what attracts potential business.

On the good news front for cosmetic dental laboratories in Florida, reports show that revenues are stable in certain sectors of cosmetic dentistry. The 2011 State of the Cosmetic Dentistry Industry report from AACD states that after a few years of declining revenues, cosmetic dentists are experiencing increased consumer interest in cosmetic dentistry and beautiful smiles. That uptick in demand expected to trickle down to more business for cosmetic dental laboratories.

Over at Suncoast, Powledge agrees that things are looking more optimistic because the laboratory is getting back to normal.

“Things are beginning to turn around. We’ve added some benefits back, and we have also learned to be more efficient with fewer people,” said Powledge. “Our high quality has remained intact because our staff is dedicated and still takes pride in the work that they do. I think the sacrifices say a lot about who we are.”

In the wake of what feels like a hope for recovery, those that have made it through should be looking ahead. Suncoast is already making plans for the future.

“We intend to expand our milling department in the near future and our implant department has become busier,” she said. “I feel that our expertise in the cosmetic end has been the thing that kept us in business. That and we do not produce cookie-cutter restorations. We’ve perfected our passion and it shows in our work.”

Despite the economic downfalls, there has to be a response. Those who take the right steps to

### Cosmetic Demographics

Three-fifths of cosmetic dentistry patients were female (60 percent) and two-fifths were male (40 percent), representing a seven-point swing toward males since the 2007 survey.

Source: AACD
protect their laboratories can continue to grow. At Suncoast, they started by adding a new product at a lower price point and created products with quicker turnaround times.

“Our new DurusZ® Full Contour Zirconia crown is priced very competitively. It has taken the place of many of our doctors full gold crowns due to the rising cost of gold. The benefit of our DurusZ® Full Contour Zirconia crown is it is priced at a flat rate. There is no extra metal fee involved,” said Powledge. “To quicken our turnaround, we added the DurusZ®, porcelain fused to metal and e.CAD® single unit posterior crowns. DurusZ® and e.CAD® are milled full contour using our Sirona inLab MC XL milling unit.”

Gagliano thinks the key to staying competitive as a cosmetic laboratory in Florida is to keep things local.

“The arguments about offshoring aren’t going to go anywhere. You just have to stick to making a quality product and try to buy American. That’s what is going to help our economy,” he said.

At the end of the day, dental care is still an essential part of overall health and consumers realize that. The American Academy of Cosmetic Dentistry notes that 99.7 percent of Americans think a smile is an important social asset, and 74 percent believe an unattractive smile can adversely affect a person’s chance for employment success. Clearly, there is a market for cosmetic dentistry.

Powledge knows that to find and keep dental clients, you have to be creative and be able to offer a reasonable price. Today’s consumers are not just demanding lower prices, they expect it.

“Be the best you can be at what you do,” said Powledge. “To stay in business, it is simple math, your income has to be more than your out go, or we all know the outcome. You have to be very creative in this market and figure out what your niche is and go with it… at a competitive price. You have to give excellent service and be efficient. Consistent quality is key. That always seems to pay off in the long run. We are also big advocates of continuing education. We believe in investing in our people. The way we see it is even if they decide to leave us, we have still made our industry better.”

Cosmetic dental laboratory owners and managers have to be willing to evolve and adapt, but that doesn’t mean sacrificing integrity or quality. It means that you have to be open-minded to a changing economy.

Meet with your dental clients and find out what motivates them to buy.

Look at your business and see if there are problems that can be fixed without spending money.

Finally, take a hard look at your laboratory and what you are doing to adapt to the evolving economy. If the answer is nothing, then it might be time for a change.

Cosmetic Demand
The demand for cosmetic dentistry procedures was primarily driven by referrals. The biggest change from the 2007 benchmarking survey is the increase in Internet usage by patients, which was up 25 percent.
Source: Aacd

Cosmetic Importance
Procedure appearance is most important to patients, followed closely by cost and longevity of treatment results.
Source: Aacd
Seven Success Strategies to Grow Your Business Fast

By Diane Estrada

What goes up must come down as Newton so masterfully discovered. Yes, an economic valley does take some maneuvering to skillfully navigate, but by keeping your head while others are losing theirs, and following these seven success strategies, you can thrive during these economic times, and end up growing your business fast as well.

Be Determined to Succeed
The attitude you hold about yourself and what you are capable of makes up the fundamental obstacle keeping you from your business success no matter how the economy is doing. It’s hard to imagine, but thought is the only thing that stands in our way of attaining what we want in life. Success is an inside job. Focus on your growth and watch as your self-confidence soars. Competency builds confidence. It builds a virtual circle feeding itself, expanding bigger and bigger. Think bigger. Be bigger.

Stop Micromanaging and Start Delegating
A business owner who tries to manage everything creates a bottleneck and stifles any opportunity for growth. You would be surprised at the number of activities that can be outsourced to free you up for the tasks you enjoy that will actually help you make money and grow your business easily. Since these people and services are sourced on demand you end up paying only for what you need when you need it. Areas to evaluate are office administration, office management, lead generation, marketing support, web site development and maintenance, product fulfillment, event management, and customer service functions. Do what you do best and delegate the rest.

Develop Strategic Alliances and Joint Ventures
Seek out ways to collaborate with others in your industry - even your competitors. You know, one plus one equals five. The key benefits to this approach include:

1. Gaining economies of scale in marketing or production.
2. Sharing and transferring of manufacturing and technical expertise.
3. Access to previously blocked markets.
4. Defeating mutual rivals.

Strategic alliances are one of the most powerful ways to quickly and inexpensively grow your business. In one of my businesses, I went from 200 visitors a month on my website to more than 500,000, with one strategic alliance - and it didn’t cost me a dime.

Focus on Growth Strategies
You’ve all heard the comment: You have to spend money to make money. Well this is the case. Spend more on marketing, spend more on advertising, give more bonuses, and cut back where you are not profitable. An important element of your growth strategy is to constantly reinvent yourself. Offer

Cosmetic Financing
Seventy-seven percent of practices offer their cosmetic dentistry patients third-party external financing services; of those offering financing, 78 percent said that it helped patients get to a yes decision. Source: AACD
creative pricing and inexpensive luxuries. Find out what your customers have re-prioritized as most important to them and figure out how your products and services can best be re-positioned to respond to their concerns. As counter-intuitive as it seems, add new products or expand your product offerings if that is what is needed. To cut back and close off is to succumb to a declining economy and business.

Stop Selling Products and Services and Build Relationships Instead

Strong relationships can help increase cash flow, close deals and promote your business more effectively. Focus on giving first, receiving second. This approach demands an investment of time, energy and genuine interest. Undoubtedly, the way to turn contacts into contracts is to establish a powerful network that utilizes your carefully cultured relationships to gain referrals.

Leverage the Internet

There is no other more powerful medium to gain exposure and add to your growth in cost effective ways than to expand your marketing presence to the Internet; for lead generation, branding, additional revenue streams and promotion.

Internet marketing is relatively inexpensive when compared to the ratio of cost against the reach of a target market, often for a fraction of the cost of traditional advertising budgets. Moreover, internet marketing has the advantage of measuring statistics easily, quickly and inexpensively. There are a variety of methods you can use to trace, measure and test different messages or offerings immediately that are most effective to your audience. Such measurements cannot be achieved through other forms of advertising and promotion.

Develop Mastery in Seeing Strengths

Focus on the best of your and your team’s successes, talents, strengths and skills. Many business owners enjoy learning how to spot their skills and strengths, yet few can skillfully see the best in others. Take this comment for example:


To see the best in others does require you to see the best in you first. Want more success? Get to know your greatest resources better. Shift your attention to what is going well, what you see as successful. Talk about your wins freely and often. You’ll be amazed at how focusing on the positive and the best creates a trust and openness that allows problems to surface sooner, as employees are not afraid of being seen only for their weaknesses.

It is no surprise that my opening and closing success strategies to grow your business fast, even in this down economy, have to do with attitude, focus and point of view. You are the designer of your destiny. Start now in leading your life, your company, yourself from an attitude of greatness, gratitude and appreciation of the best that surrounds you.

About the Author:

Estrada, the Business Ballerina, is a successful business executive and entrepreneur. She shares tips and lessons learned from years as a ballerina to teach women entrepreneurs how to build million dollar businesses with grace and ease. To learn more about her programs and sign up for more free tips like these, visit her website at www.businessballerina.com.
We will help you

COMPETE

not compete against you.

NADL 2012 Supplier of the Year!

Looking for great customer service, great prices and a knowledgeable staff?

Look no further.

Call Nowak Dental Supply today!
Let us amaze you.

800-654-7623

6716 Hwy 11 • Carriere, MS 39426 • www.nowakdental.com
Precision at the press of a button.

The fully automated IvoBase precision press system compensates for acrylic shrinkage as it cures. The result is a denture base with outstanding accuracy, density and strength at the press of a button.

Visit Ivoclarvivadent.com/IvoBase to learn more!
Precision at the press of a button.

Introducing
IvoBase™
Precision Press Processing.

The fully automated IvoBase precision press system compensates for acrylic shrinkage as it cures. The result is a denture base with outstanding accuracy, density and strength at the press of a button.

Visit Ivoclarvivadent.com/IvoBase to learn more!
In this case, a female patient presented with a functional pre-existing zirconia type restoration, however, she was unhappy with the esthetics of her new smile. She had eight layered zirconia crowns on teeth Nos. 6 – 13, the manufacturer of which was not revealed to me. The teeth were too long for her mouth and the color did not blend into her existing dentition. As you can see in Figures 1 and 2, the light reflectance make the restorations seem esthetically unpleasing.

As much as color and shape play an important role in the final case approval, the ability of light to interact with nature and our restoration can be what makes or breaks the esthetic outcome. In
addition to improving the esthetics of her smile, the patient requested a metal-free restoration.

There are four patient parameters to consider when creating a treatment plan and deciding upon the materials to be used.

1. Periodontal — In this case the patient didn’t have any bone or structural problems. However, some slight gingival recession was noted on teeth Nos. 7 -10.

2. Functional — In this case the patient had normal wear and tear on her teeth, which was not excessive, and her occlusion was acceptable.

3. Biomechanical — The pre-existing restoration was of a zirconia base with sealed margins and, three months after insertion, no breakage.

4. Dental Facial — This is the main area of concern for the patient and the dental team, so this is where I focused most of my attention during the treatment planning stage because the other parameters did not pose any major concerns.

Historically, zirconia has been difficult to work with for esthetics because of the opacity of the material. Technicians are sometimes not sure how to treat the zirconia substructure and tend to utilize it with similar concepts to porcelain to metal, which makes light transmission difficult. Also, the poor or inadequate selection of colors available for zirconia made it even more challenging for the technician thinking through the process.

However, Lava™ Plus High Translucency Zirconia (3M ESPE) is a more manageable reflective index based on translucency of newer materials that allows for more natural light transmission through the zirconia without sacrificing strength. The patented shading technology ensures the color is not on the surface of the material, but comes from within and is an excellent color match to the VITA® Classical Shade Guide and Vita System 3D.
Master® shades. The warm, natural shades and shade gradients from the inside thanks to dyeing liquids are another unique aspect to this zirconia.

Lava™ Plus High Translucency Zirconia and Lava™ Plus Highly Translucent Frameworks are indicated for single crowns, bridges as long as 48mm, splinted crowns, crowns on implants, cantilever bridges, inlay and onlay bridges and anterior adhesive bridges. The material allows the technician to decide whether to create a monolithic or layered restoration.

At this stage of treatment planning, however, neither the dentist nor I was ready to commit to a specific material. First, we needed to conduct an esthetic evaluation. Figures 3 - 5 show the patients pre-existing restoration. As you can see, the teeth were 1mm - 2mm too long. The dentist shortened the pre-existing restorations and used this modified version to create the provisionals. This allowed the dentist to better explain to the patient where the incisal edge needed to be for optimal esthetics.

The length and position of the centrals is different for every patient. However, when he or she smiles, there should be between 1mm and 4mm of tooth displayed, depending on the patient's gender, age and bite classification. The true key though is that the restoration should look esthetic in the patient's face. This can be a time when science goes out the window because while science can give us data to follow, that data doesn’t always fit the patient protocol. As technicians we have to be able to recognize that and act accordingly when manufacturing a restoration.

In Figures 6 - 7, you can see that the shades of the pre-existing restoration do not blend in with the patient’s natural dentition. While it’s true that no two natural teeth are the exact same shade, they do harmonize. For example, centrals tend to be in same shade family while the same is true of bicuspid, incisors and laterals. But when you look at this patient, you see disorder in the color story of her smile.

Once I'd evaluated all of these patient parameters, I made my final material decision to use Lava™ Plus High Translucency Zirconia based on the final tooth preparation. The Lava™ Plus High Translucency Zirconia system includes 18 natural, warm colors; seven effect shades and a fluorescent effect shade for unlimited individualization before sintering.
After the dentist submitted the final impression (Figure 9), the model and die work was done in the usual fashion. Next, the provisional index and provisional cast become the guide for the case moving forward.

The zirconia framework, designed according to the provisional index, forms the foundation of the restoration. I like to look at framework as being a baby version of the final tooth and the goal is to design framework to be functionally and esthetically supportive of the ceramic. The zirconia framework can be designed via CAD or it can be designed by hand utilizing a dual scan. For this case, I designed by hand and scanned it.

The framework was milled using a Jensen Mill (Jensen Dental). This process took approximately 10-15 minutes per tooth (Figures 10 - 14).

In its green state, the zirconia framework can be colorized. In this case, that was not as important because of the darker stump shade such as seen in No. 7. Because I’d decided to use a more translucent material in Lava™ Plus High Translucency Zirconia, the framework didn’t require much colorization. The final value of the case was to be in a whiter shade range and although I wanted the light transmission into the natural tooth, I still needed the masking ability of the whiter core. This is a true advantage for technicians with this material. In this case, I wanted to use the whiteness of the coping to mask the stump shade of the teeth and create more value and brightness in the final restoration.

That’s not to say I didn’t make any additions. I treated the zirconia framework with a florescent material (Lava™ Plus Effect Shades, 3M ESPE) to treat the core. This step allows the technician to start at the base of the restoration to get the light right so he or she can mask the coping edge. By using colorants, you can make the restoration absorb and reflect light where you want it to.

Figure 15 shows the opacious dentin build up.

Figure 16 is the dentin build up. The dentin steps help transition the restoration’s value and chroma. As I’m building the dentin, I keep a provisional with me but have the index on the model to easily reference as I’m building.

The next step is to complete a wash bake (Figure 17). This allows me to ensure that the restoration is progressing on the right path for the first bake.
Figure 18 shows the wet ceramic layered onto the zirconia framework. After that, translucent material was layered onto the restoration. A final glaze bake is done (Figure 19) and the restoration polished. The final restoration’s luster was achieved with a pumice stone.

The case was delivered and seated without problems. Both the patient and dentist were happy with the final restoration (Figures 20 - 23).

As a technician, I’m never 100 percent happy with a restoration. I’m too much of a perfectionist for that. However, what I’ve learned in my years of experience is that you cannot judge the esthetics of a finished restoration on the model. What really matters is how it blends in with the patient’s natural dentition and how it looks intraorally. Looking at these final photos and the patient’s genuine smile, I’m very pleased with the results achieved using Lava™ Plus High Translucency Zirconia.

About the Author:

Pizzi is the owner and manager of Pizzi Dental Studio Inc. in Staten Island, N.Y., and is a board member of the ASMDT and a member of ICIO and AACD. He is an educator in the master dental technician program of New York University. In addition, he is a technical fellow and board member of the Northeastern Gnathological Society.
SOUTHEASTERN CONFERENCE OF DENTAL LABORATORIES PRESENTS
STAYING IN THE GAME

Friday Morning
• 4 Optional Seminars

Friday Afternoon

Saturday Morning
• Keynote Presentations
• Regulatory Standards
• Analyzing Technology Panel
• Saturday Afternoon Breakouts
• Hands-On Expo BACK BY POPULAR DEMAND!

Rolling back registration rates in 2013 to help you STAY IN THE GAME!

March 22-24, 2013
Georgian Terrace Hotel -- Atlanta, GA

For more information on SCDL program and hotel, visit www.scdl-online.org
Training Today’s Younger Workforce

By Rob D. Jones

“You should be clear in your mind as to what it is that inspires you to train.”

It’s said that the key ingredient of being an excellent trainer is passion. But I think what’s more important is to ensure that that passion can be seen, heard and felt by your audience. This is especially so for today’s younger workforce. Demonstration of passion for imparting knowledge and skills to others creates a dynamic engagement — it motivates, inspires and builds rapport far greater than any extrinsic motivators, and it’s free.

Experiential learning is the most effective way of learning, so provide this for them with plenty of practical application during training. Exercises, small group projects, outcome-focused discussions and on-the-job activities all provide opportunity to embed new learning. Whatever you do, make it meaningful — Gen Y (born from the late 1970s to late 1980s) will appreciate this, not activities for activities sake. Link everything to their real-life context.

As a trainer, you need to ensure you enter the training room in the right mind-set, or training state. The right state is founded in your values and beliefs as a trainer. You should be clear in your mind as to what it is that inspires you to train, not just because training is something you do for a job. For the trainer, every training session should be eagerly anticipated, an opportunity to spark curiosity, provide challenge, excite, inspire and entertain, and learn. That’s your training state.

Think about your training values. What drives you to train? What you want to gain from training? How do your values make you feel? It should be a positive feeling — if it’s not quite as positive as you feel it should be, take some time to re-align your training values.

Trainers are inspirational, they are mentors, trainers should utilize any activities or opportunities that encourage learning — there are no rules. Your values should not be something you air occasionally, but every time you stand up and train.

Key points for trainers:
• Demonstrate passion.
• Provide experiential learning opportunities.
• Support trainees learning in the workplace.
• Provide learning resources that trainees can access on-the-move.
• Provide coaching — you are seen as a mentor as well as a trainer.
• Be in a training state at all times.

It really doesn’t take much to keep our younger workforce motivated — respect their values, personalize what you do, train to inspire and show them you mean it. If you do, you will find that many employees will become more motivated in your multi-generational workplace, and it’ll be a great motivational environment to work in. There’ll be a buzz, a dynamic, a natural intrinsic motivator that carries everyone along with it, and that’s got to be good for everyone.

About the Author:
Jones is a business coach at Sequential Coaching.
“Your Experts in Full Contour Zirconia Crowns”

YOUR HIGH-END MILLING CENTER

U.S. DENTAL

★ Aesthetic Full Contour Crowns
★ Expert Technical Advice
★ Fast Turnaround
★ Competitive Pricing
★ We Make Crowns “Not Parts”

Free Demo Case*
“The one you never have time to make.”
(New Customers only)

★ Super Translucent

<table>
<thead>
<tr>
<th>Service</th>
<th>From Model</th>
<th>From STL File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zirconia Copings</td>
<td>$39.95</td>
<td>$29.95</td>
</tr>
<tr>
<td>Zirconia Bridge Work up to 3 units</td>
<td>$49.95</td>
<td>$39.95</td>
</tr>
<tr>
<td>Zirconia Bridge Work 4+ units</td>
<td>$54.95</td>
<td>$44.95</td>
</tr>
<tr>
<td>Zirconia Single Unit Full Contour</td>
<td>$59.95</td>
<td>$39.95</td>
</tr>
<tr>
<td>Zirconia Bridge Work Full Contour</td>
<td>$65.95</td>
<td>$54.95</td>
</tr>
</tbody>
</table>

TAMPA, FLORIDA
info@usdentalmilling.com
813. 313.6100

★ Send us 10 units and we will fabricate a full contour, articulated case complete with your logo and display box to show your doctors.
The Florida Dental Laboratory Association offers a scholarship that supports educated or trained dental technicians who are working toward certification through the National Board for Certification in Dental Laboratory Technology’s Certified Dental Technician Program.

FDLA will present as many as four $500 scholarships each year at the Annual Southern States Symposium & Expo Awards Luncheon. 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 NBC application and testing fees for the CDT exam.

Eligibility is awarded based on education, certification, employment, and volunteer work. Dental technicians can apply to obtain their CDT certification and current CDTs can apply for the scholarship to gain additional specialties.

Applicants must be members of the Florida Dental Laboratory Association and may be asked to provide additional information on request to the Florida Dental Laboratory Association Scholarship Committee. Scholarships are awarded in the form of a voucher. Receipts of valid purchased study materials or exam application fees must be presented and submitted to the FDLA office within the dates allotted on the scholarship voucher for reimbursement of expenses up to $500. The scholarship must be used within one year of its award.

Download the scholarship application from FDLA’s website at www.fdla.net. All applications must be submitted to FDLA by April 15.
The 2013 FDLA Deep Sea Fishing Tournament

The 2013 FDLA tournament will be limited to 70 Registrants, so sign up early! Anglers will be grouped randomly to six to a boat, along with a professional charter boat captain (6 people to a boat maximum). Some of the fish you might catch include Kingfish, Spanish Mackerel, Bonito, and Barracuda (of legal size). Children over 12 are welcome to join their parents on this exciting day of deep sea fishing and camaraderie.

Date and Location

Clearwater Municipal Marina • 25 Causeway Blvd • Clearwater, FL 33767

The tournament will be held on Saturday, April 13, 2013 at the Clearwater Municipal Marina in Clearwater, Florida. Boats will depart at 7:00 a.m. and return at 1:00 p.m. for a group lunch and awards presentation at Crabby Bill's Restaurant located adjacent to the Marina.

Cost

$175.00 per person (adult or child)

This cost includes participation in the Fishing Tournament, a ticket to the group lunch and awards presentation to be held at Crabby Bill's Restaurant immediately following the tournament and a tournament t-shirt.

Not Fishing? Lunch Ticket

$25.00 per person (adult or child)

This cost includes ticket price for angler's family members to attend the group lunch and awards presentation at Crabby Bill's Restaurant following the fishing tournament and a tournament t-shirt.

Registration Deadline

Due to the nature of this tournament, all registrations MUST be received by FDLA no later than Friday, March 15, 2013 in order to secure enough fishing guides for each boat.

Refund Policy

All refund requests must be received in writing at the FDLA office no later than Friday, March 15, 2013. No refunds will be given after 3/15/2013. All refunds are subject to a $30.00 administrative fee. Registrations are transferable.

Hotel Reservations

There are several hotels located within 1 mile of the Clearwater Municipal Marina. Please contact hotels directly for hotel reservations.

Awards

Trophies will be given to anglers in the following categories:

1st Place Boat
Largest Fish
Smallest Fish

Registration Form

Mail registration forms and payment to FDLA, 325 John Knox Rd, Ste L103, Tallahassee, FL 32303 or fax credit card payments to FDLA at (850) 222-3019.

Name ____________________________________________________________  ☐ CDT
Company ___________________________________________________________________________  ☐ CDL
Address _______________________________________________________________________________________
City ________________________________________ State ___________ Zip ___________________________
Phone ______________________________ Fax _____________________ E-mail ______________________________

Options

☐ $175.00 Full Fishing Tournament Registration

Anglers Only — Check Your Adult T-Shirt Size: ☐ SM ☐ M ☐ L ☐ XL ☐ XXL

☐ $25.00 Lunch Ticket and Awards Presentation Only (Includes tournament T-shirt) ☑ ___________ (number of tickets)

Check Your Adult T-Shirt Size: ☐ SM ☐ M ☐ L ☐ XL ☐ XXL

Payment

Total Enclosed: $ ______________________

☐ Check made payable to FDLA and mailed to the address above.  ☐ Credit Card: ☐ MC ☐ Visa ☐ AmEx

CC# __________________________________________ Exp. _________________ CCV* _______________

* This is the 3 digit number that appears on the reverse side of your credit card. For Amex cards only, this is the 4 digit number on the front of your card.

Name as it Appears on Card ___________________________ Signature of Card Holder ______________________________

If you have any questions regarding the FDLA Fishing Tournament, contact Jillian M. Heddaeus, CMP in the FDLA office at (850) 224-0711, (850) 222-3019 – fax, or by e-mail at jillian@fdla.net.
If there is a clinic or meeting you would like added to the FDLA Calendar of Events, submit the information to jillian@fdla.net. If the application deadline for the CDT or modularization exam has passed, you may call NBC at 800-684-5310 to see if space is still available. If space is available, late applications are subject to a $25 late fee in addition to application fees. If you are interested in hosting a CDT/RG exam, or to find additional testing dates and locations, please contact NBC at www.nbccert.org or 800-684-5310.

For the latest calendar information, visit www.fdla.net/calendar.htm

2013

February 26, 2013
FDLA District Clinic – Miami
Porque? Como? Cuando? Usar e.max
Rafael Santrich
Miami Airport Marriott, Miami
Este curso será presentado en español/This course will be presented in Spanish.

If there is a clinic or meeting you would like added to the FDLA Calendar of Events, submit the information to jillian@fdla.net. If the application deadline for the CDT or modularization exam has passed, you may call NBC at 800-684-5310 to see if space is still available. If space is available, late applications are subject to a $25 late fee in addition to application fees. If you are interested in hosting a CDT/RG exam, or to find additional testing dates and locations, please contact NBC at www.nbccert.org or 800-684-5310.
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.

**Accurate Metals & Refining, LLC**
Phone: 866-973-3463  
Fax: 860-871-2925  
www.accuraterefining.com  
Refiner of precious metal scrap.

**Amann Girrbach America, Inc.**
Phone: 704-837-1404  
Fax: 704-837-0763  
www.amanngirrbach.com  
Amann Girrbach, a leading innovator in digital dental prosthetics, delivers a collection of sophisticated, scalable, user-friendly and affordable CAD/CAM solutions for dental labs of all sizes. The Ceramill CAD/CAM System with scanners, software, 5-axis wet/dry mills and milling blanks in a range of materials, allows labs to keep high-quality restorative production and profit - in-house.

**Argen Corporation**
Phone: 858-455-7900  
Fax: 858-626-8658  
www.argen.com  
The Argen Corporation provides a wide range of alloys to meet any need, as well as refining services.

**Cardinal Rotary Instruments**
Phone: 800-347-0599  
Fax: 877-811-9250  
www.cardinalrotary.com  
Specialty rotary instruments and unique niche products.

**Dentsply Prosthetics**
Phone: 352-293-1471  
Fax: 813-436-5196  
www.dentsply.com  
Denture Teeth, Denture Materials, CAD/CAM, Porcelain, Lab Equipment

**Heraeus Scrap Refining**
Phone: 574-299-5502  
Fax: 574-291-2907  
www.heraeus-scrap.com  
Scrap refining.

**Ivoclar Vivadent, Inc.**
Phone: 800-533-6825  
Fax: 770-835-4794  
www.ivoclarvivadent.com  
Leading international manufacturer of high quality dental materials for preventative, restorative and prosthetic dentistry.

**Lincoln Dental Supply**
Phone: 856-488-1333  
Fax: 856-663-2797  
www.lincolndental.com  
Specializing in removable prosthetics, Lincoln also has a comprehensive line of packaging supplies and a vast array of rotary instruments.

**Marathon Solutions**
Phone: 913-953-5308  
Fax: 913-953-5353  
www.marathonsi.com  
Credit card processing specialist for dental laboratory industry that provides preferred wholesale rates with complimentary gateway.

**Nowak Dental Supplies, Inc.**
Phone: 800-654-7623  
Fax: 601-749-3534  
www.nowakdental.com  
Nowak Dental Supplies is a family owned supply company servicing the dental industry for over 65 years. Specializing in all ceramic systems and a full line of removable products, including the Heraeus line of teeth. Nowak distributes dental lab furniture, equipment, and supplies.

**Refund Logistics LLC**
Phone: 281-404-4800  
Fax: 281-404-4799  
www.refundlogistics.com  
Refund Logistics recovers refunds for UPS and FedEx Customers in the Dental Arts Industry. Every case is electronically scrutinized on over twenty audit points including late delivery, invalid address correction & invalid residential surcharges. Credits and refunds are posted directly to your Lab’s FedEx or UPS account. We work for a percentage of your savings - no refund, no charge!

**Showcase Dental Lab**
Phone: 941-625-5757  
Fax: 941-625-7980  
www.showcasedental.com  
Quality full service laboratory experts in implants including old and outdated.

Want information on supporting Florida’s dental laboratories by becoming an FDLA Business Partner? Call the FDLA office at (850) 224-0711 or e-mail membership@fdla.net.
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@thewritemessag.net with Focal Point in the subject line. We want to see you in Focus.

Benefit of Experience

After more than 30 years as a dental laboratory owner, Lenny Herrera, CDT, still loves coming in to The Surveyor Dental Arts, Inc., and helping patients.

The two-employee laboratory specializes in partial dentures and has since Herrera bought the laboratory in 1980. He spent the first few years building up the client base, improving quality and increasing fees to reflect the better quality of the finished restoration. All the while, he’s made a sustained effort to give back to the community through Donated Dental Services/Dental Lifeline Network.

Herrera, along with 226 other dental laboratory owners and 420 dentists donated $342,473 worth of dental services to 95 disabled or elderly Floridians who needed oral health care assistance in 2011 and 2012. Donated Dental Services is a collaborative involving dentists and dental laboratories who provide care for disabled, elderly or medically-compromised individuals who cannot afford necessary treatment nor get public aid.

“I do tons of donated work and it makes me proud that my work is going to somebody who needs it,” he said.

That philosophy carries over to his involvement with his professional peers. Herrera is a Florida Dental Laboratory Association board member. That volunteerism means a sacrifice of time, which no laboratory owner has in large supply, but for Herrera, it’s worth it.

“Being involved makes me stay on top of things, be aware of what’s going on and learn from other technicians and laboratory owners. I have learned quite a bit since I joined the FDLA,” he said.

State-level awareness that Herrera gets as an FDLA member is important for all dental laboratory owners, managers and technicians in Florida, he argues, because regulations continue to evolve and the need for business acumen increases.

“It’s extremely important,” he said. “The reason is because we small lab owners tend to open up a lab and sit down and just work. We have no experience in how a business should be run and we get so involved in the work that the business becomes a rat race instead of a business. We concentrate on the work and ignore the business part and that part is extremely important.”

Being an FDLA member can really help small dental laboratories because of its business and regulation benefits including the Florida State Laws Affecting Dental Laboratories manual; FDLA insurance services; the free human resources hotline and discounted services on credit card processing and shipping.

“By joining FDLA, laboratory owners can stay on top of any new information and enjoy the benefits. Why not join and exchange information with everyone else?” Herrera said.
THE FIRST AND ONLY DIGITAL NOBLE SLM COPING

AVAILABLE ONLY AT ARGEN

Partnering with Argen Digital is simple!
- Design and scan your restorations
- Upload STL files to www.argendigital.com
- Receive your substructures in just 2 days

EXTREMELY ACCURATE  FLAT FEE PRICING  2-DAY TURNAROUND

MADE IN THE USA

ARGEN® DIGITAL
(888) 779-0323
www.argendigital.com

We also offer Non Precious SLM copings and long-span bridges to fit all your restorative needs.
Aurident Refining Services turns your scrap into cold, hard cash!

Refining Services you can trust!
- State-of-the-art assay procedures assure accurate analysis
- Payments based on gold, platinum, palladium and silver contents
- Flexibility in methods of return (coins, credit, check)

SPECIAL OFFER
$50 OFF Your next refining lot charge

Offer expires 12-31-2013

For more ways to save, visit aurident.com