

**EXCELLENCE**  
 IN COSMETIC DENTISTRY  
 2014  
 2014  
 2014  
 2014  
 2014

## Dentistry in the Digital World

*"Enhancing the Contemporary Esthetic Practice with Digital Photography and Presentations"*

Dr. Jack Ringer  
Faculty - Esthetic Professionals

## Why Understand and Use Dental Digital Photography?

## General Dental Uses

- Patient / Doctor communication
- Doctor / Lab communication
- Insurance communication
- Medico/Legal

## Photography Check List

Pre-Op Smile    Pre-Op Smile    Pre-Op Smile  
 Pre-Op Smile    Pre-Op Smile    Pre-Op Smile  
 Pre-Op Smile    Pre-Op Smile    Pre-Op Smile  
 Pre-Op Smile    Pre-Op Smile    Pre-Op Smile

Temp+L Lateral    Temp+R Lateral    Temp+Smile    Temp+Face

## "Specialized" Dental Uses

- Lecturing
- Practice image
- Accreditation
- Computer simulation
- Patient education

**Case Type # 1**

**Anterior Aesthetic Requirements**

**AACD Member # 003303**

**Treatment List:**

- Teeth #'s 5 - 12:**  
Porcelain laminates
- Periodontal Therapy:**  
Crown lengthening # 8 & 9
- Teeth # 22 & 27:**  
Incisal composite build-ups
- Remaining Dentition:**  
Bleaching

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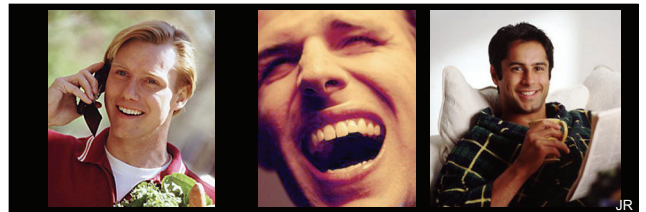
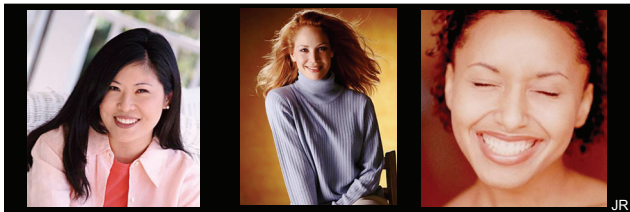
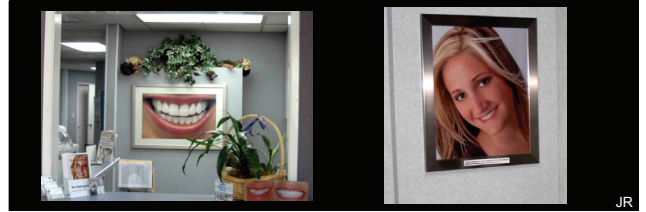


**Marketing**

- Advertising
- Office décor
- Websites
- Display of treatment performed

*Create A Smile In Our Office!*

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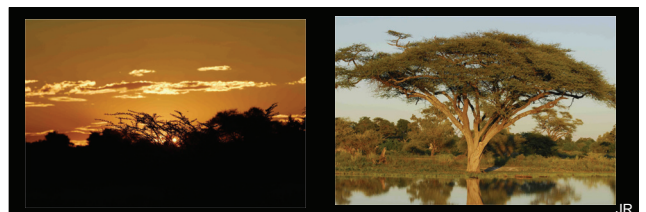


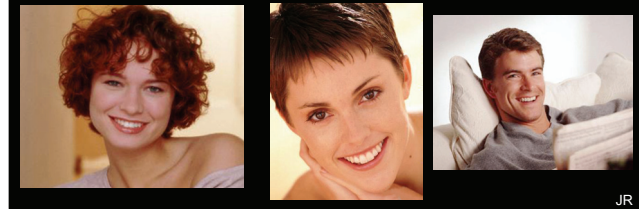
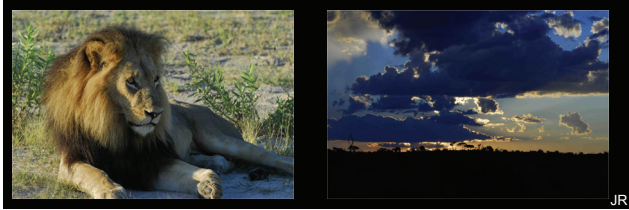
**Personal Uses**

Vacation photography  
Record keeping  
Artistic



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How do we choose the right  
 How do we use our digital  
 How do we store and share  
 How do we manipulate our images  
 How do we view or present

**?**

**to Ask!**

**What Digital Devices are Available?**

Software  
 Digital Cameras  
 Scanners  
 Computers  
 Printers  
 Peripherals  
 Internet / E-Mail  
 Memory Devices

**What Do We Need?**

Digital Camera - e.g. Nikon D 200, Canon G5  
 Computers - e.g. desktop vs laptop, network, back up  
 Peripherals - e.g. printers, mirrors, readers  
 Software - e.g. Photoshop, PowerPoint, AlterImage

## What type of Camera System should we use?



## Digital SLR



## Point and Shoot



## Digital SLR

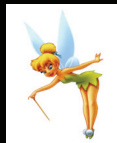
## vs. Digital Point and Shoot

Single lens reflex (SLR)  
 "you see what you see"  
 Larger CCD/ CMOS sensor  
 Interchangeable lenses  
 (100/105mm macro required)  
 Automatic and manual control  
 Ring/Point flash required

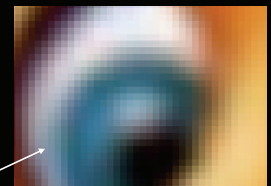
"Computerized" image  
 Smaller CCD sensor  
 Fixed lens  
 Automatic control with less manual control  
 Requires "special" dental modifications  
 i.e. lens adapter, flash diffuser

## What's the Story about Megapixels??

What are they?  
 How many do we need?  
 Digital images are viewed on a monitor or printed  
 Digital images can be manipulated



Monitors "see" only about 2 megapixels  
 Printing: approx. 3 megapixels needed  
 for 4"x6" photos  
 approx. 8-12 megapixels needed  
 for large prints  
 Manipulating, i.e. zooming, we need about  
 8-12 megapixels to retain printing quality



Individual picture elements "pixels"

## Correct Lighting is Essential!!

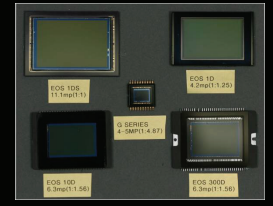
- Consistent color and value of dental photography is necessary for ideal results
- Cameras are designed to control light automatically based on "natural light"
- Indoor dental photography ideally requires lighting to be manually controlled



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The larger the sensor  
the greater the price!

The larger the sensor  
the more real the  
image size is.



## Computers:

- Single user verses network
- Laptop verses desktop
- Large hard drive and increased RAM
- High resolution monitors
- Back-up systems

## Peripherals:

- Digital film, i.e. memory cards
- Memory card readers
- Printers
- Scanners
- Retractors, mirrors, contrastors

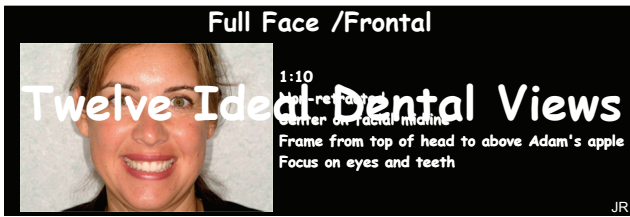
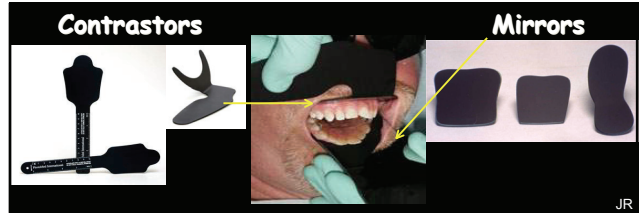
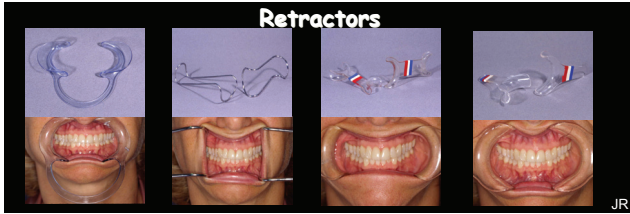
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### Retracted Frontal



1:2  
Retracted  
Center at midline  
Horizontal plane bisects incisal 1/3  
Focus on canines

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### Right Lateral



1:2  
Retracted  
Center on lateral incisor  
Horizontal plane bisects incisal 1/3  
Focus on canine and central incisor

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### Left Lateral



1:2  
Retracted  
Center on lateral incisor  
Horizontal plane bisects incisal 1/3  
Focus on canine and central incisor

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### Maxillary Frontal



1:1  
Retracted  
Center at midline  
Horizontal plane bisects middle 1/3 of teeth  
Focus on centrals

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### Right Lateral



1:1  
Retracted  
Center on lateral incisor  
Horizontal plane bisects middle 1/3 of teeth  
Focus on lateral

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### Left Lateral



1:1  
Retracted  
Center on lateral incisor  
Horizontal plane bisects middle 1/3 of teeth  
Focus on lateral

JR



### Maxillary Occlusal



1:2  
Retracted  
Center at midline  
Horizontal plane bisects second premolars  
Focus on second premolars

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### Mandibular Occlusal



1:2  
Retracted  
Center at midline  
Horizontal plane bisects second premolars  
Focus on second premolars

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### Computer Simulation



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Do it Yourself or Send it Out?

Before

Simulation

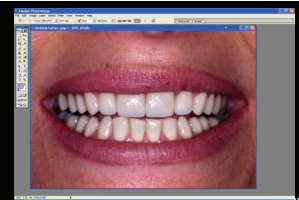
Time verses Ability verses Expectations

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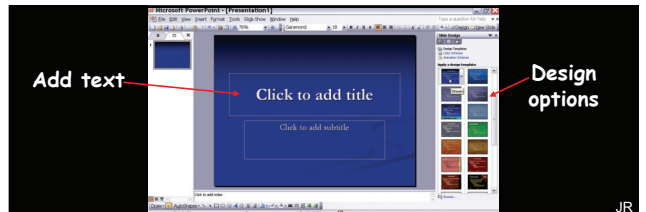
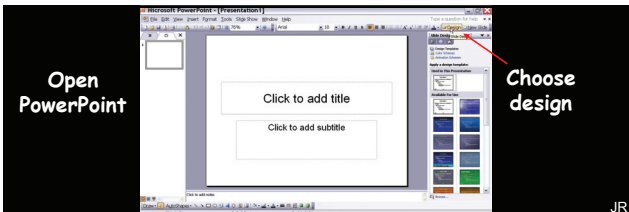
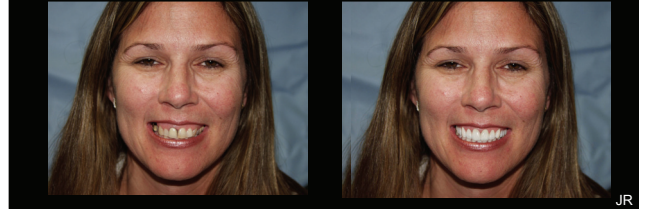
Professional Services e.g.

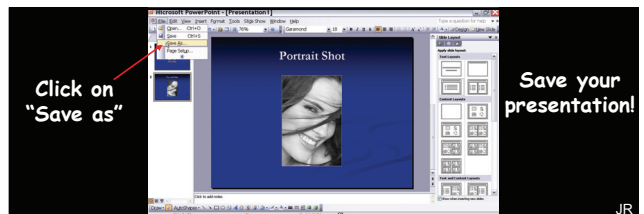
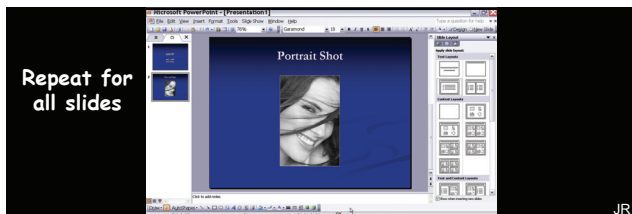
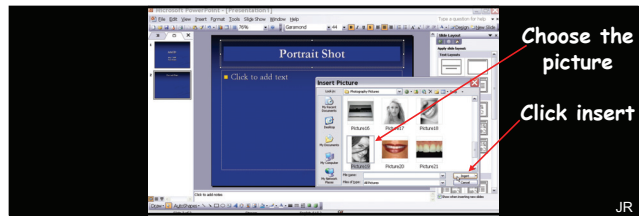
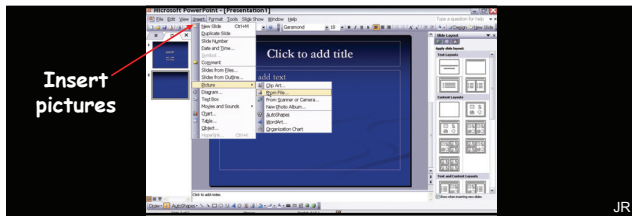
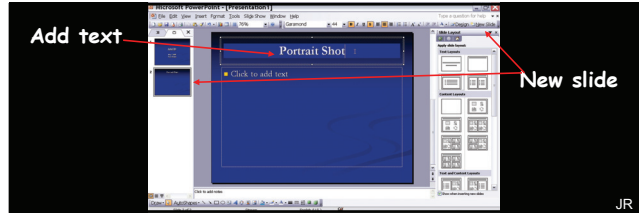
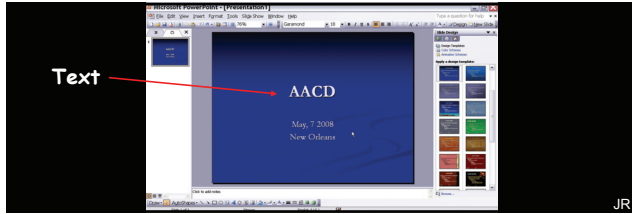
SMILES

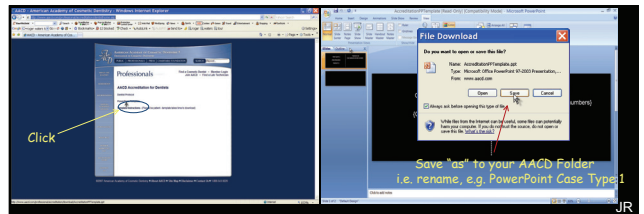
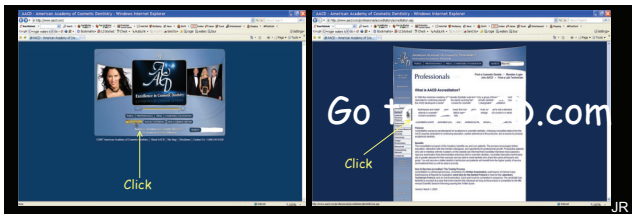
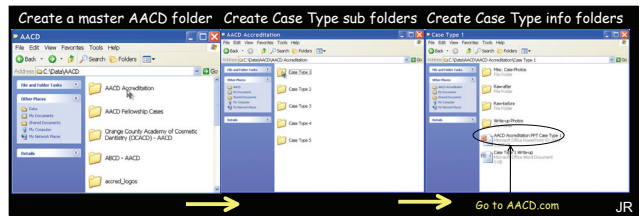
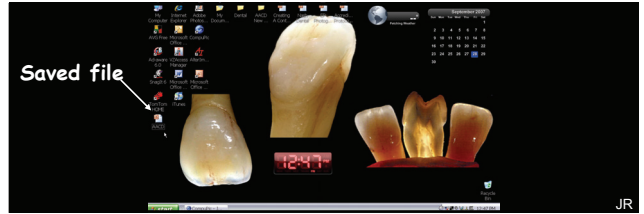
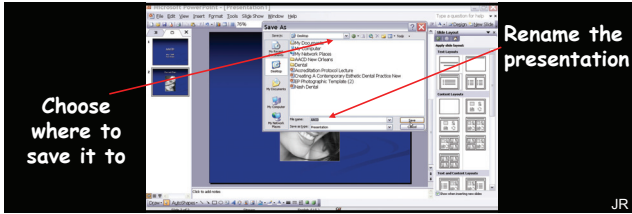
Available Software e.g. AlterImage  
Photoshop  
Vipersoft

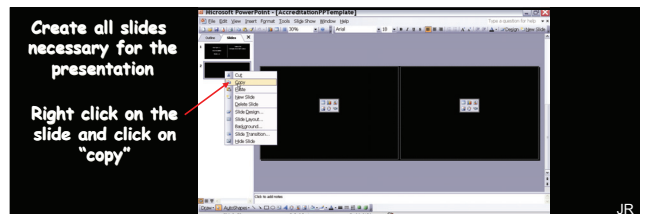
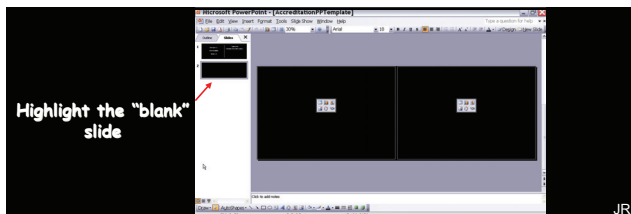
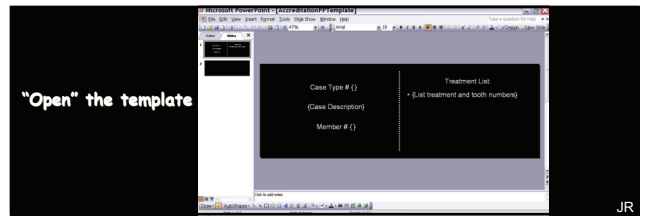
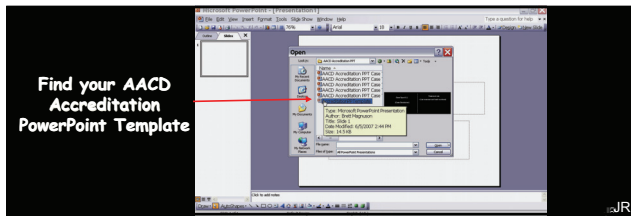
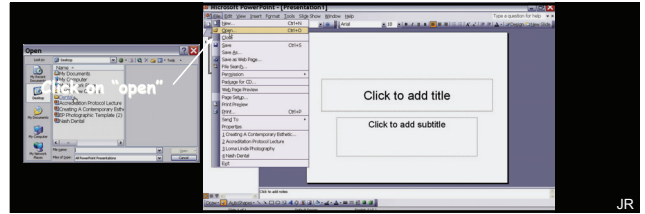
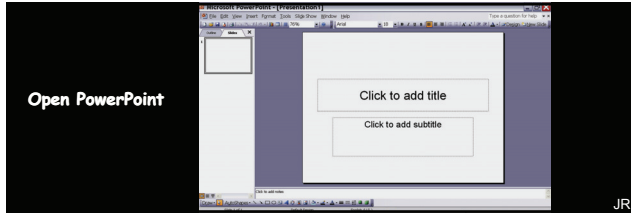


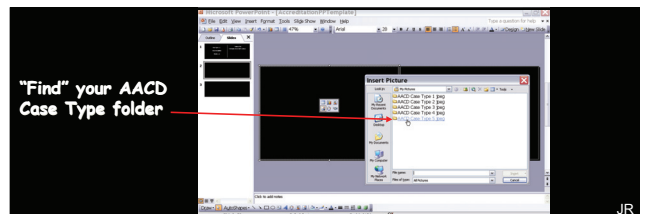
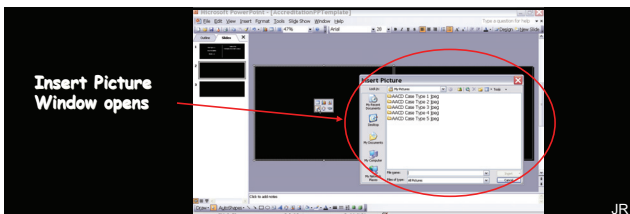
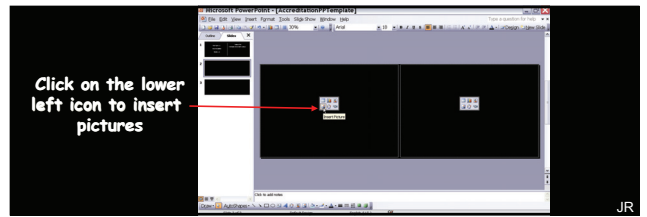
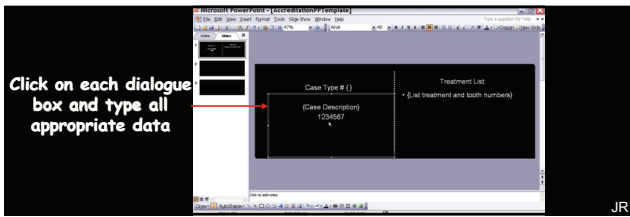
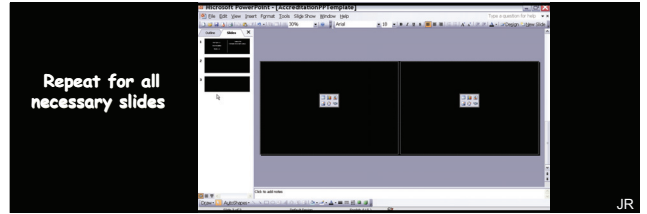
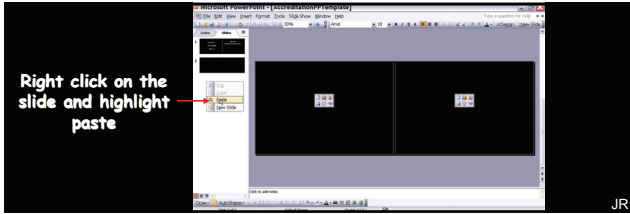
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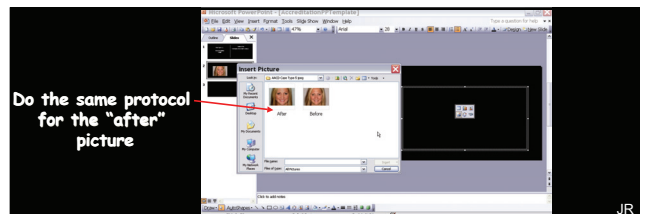
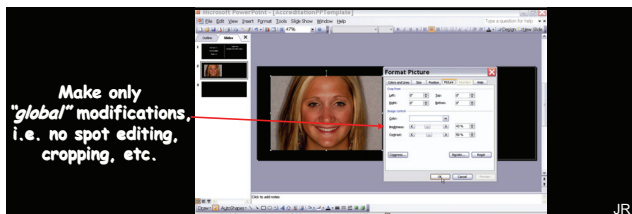
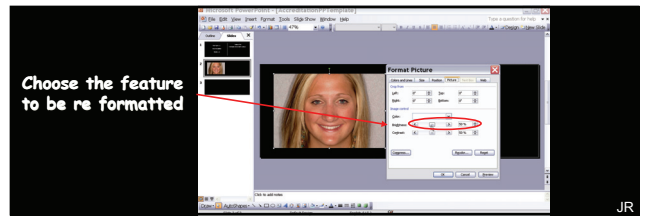
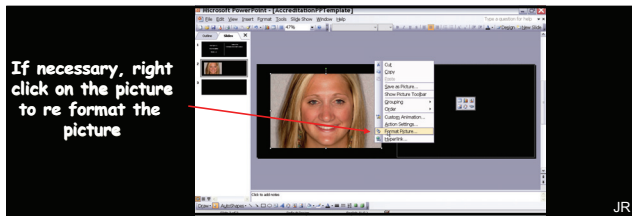
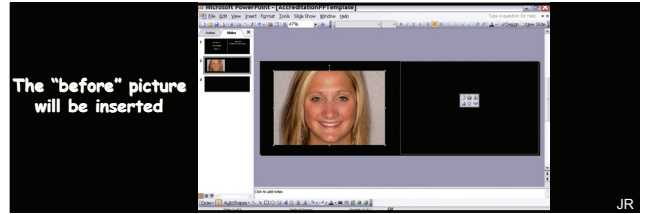
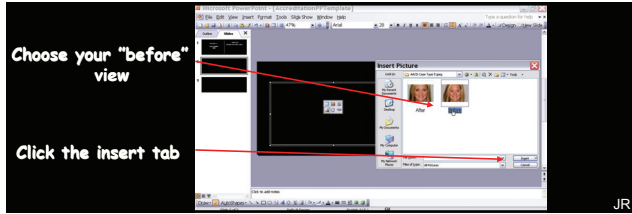


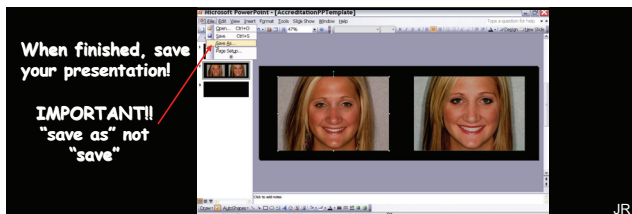
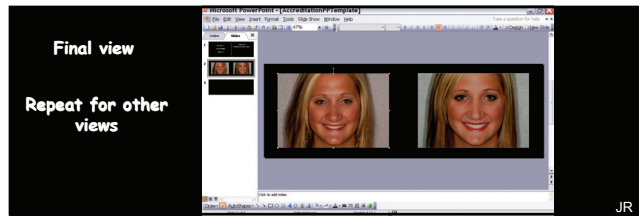
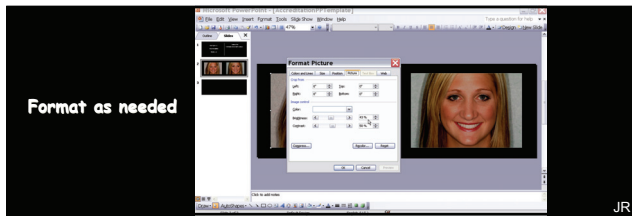
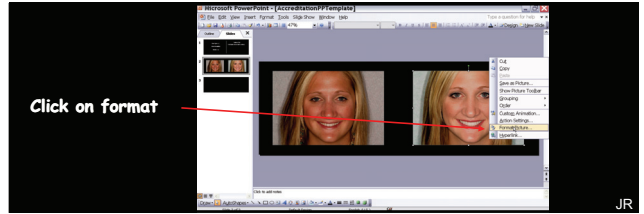
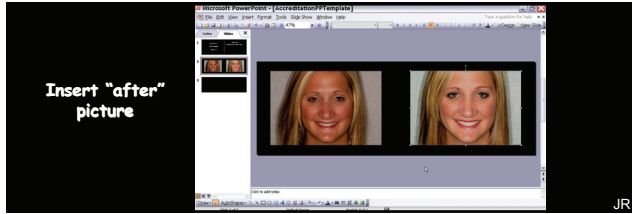















**PowerPoint for AACD Accreditation**



**Bourbon Example**

JR

<u>Case Type #4</u>	<u>Treatment List</u>
<u>Direct Class IV Resin</u>	<u>#8 - Direct facial resin restoration</u>
<u>AACD Member # 003303</u>	<u>#9 - Direct Class IV resin restoration</u>

JR







**Thank You!**

Dr Jack Ringer  
Accredited Member - AACD  
President - OCACD  
Faculty - Esthetic Professionals  
714-974-0313  
[www.dentalcosmetics.com](http://www.dentalcosmetics.com)  
[drringer@dentalcosmetics.com](mailto:drringer@dentalcosmetics.com)

