

## Dental Assisting

### Digital Photography: The First Step in the Record-Gathering Process

by Shannon Pace Schmidt, DA

Digital photography allows clinicians to put the theory that “a picture is worth a thousand words” into practice. Before the dentist can plan a treatment, the patient must first go through an extensive record-gathering visit. Assembling patient information and understanding any signs of instability are important. This article will help dental assistants learn the value of photographs in the record-gathering visit.

#### Record-Gathering Series

At the Dawson Academy, a series of 20 photographs are used in the record-gathering appointment.

- Full-Face
- Profile Headshot
- Smile Views (3 views)
- Rest
- “E”
- Tipped-Down
- Profile Smile
- Maxillary and Mandibular Occlusal (2 views)
- 1:1.2 (close-up) (3 views)
- Retracted 1:3 (3 views, teeth apart)
- Retracted 1:3 (3 views, teeth together)

#### Portrait Photographs 1:1(no magnification)/5.6(F - Stop)/Autofocus

##### Full-Face

This shot is framed horizontally. The full-face view should show the top of the head to just below the chin. The nose should be in the center of the portrait, which will place the head in the center of the frame.

##### Profile Headshot

The patient’s head is turned to the side and the condyle should be framed in the center of the photograph. The mouth should be at rest position.

#### Intraoral Photographs 22 (F-Stop)/Manual focus

##### Full-Smile: Frontal View—1:2 Magnification

The central incisors are the focus of the full-smile, frontal view. This view should include the corners of the mouth. The patient should exhibit a full, natural smile. The nose and chin should not be in the frame.

##### Full-Smile: Right and Left Lateral Views—1:2 Magnification

The lateral smile view is made with the lateral incisor as the focal point and center of the image (Figure 1A [View Figure](#) and Figure 1B [View Figure](#)). The frame of the picture should include the upper and lower lips, as well as equal amounts of skin above and below the lips. Avoid taking this as a profile photograph.

##### Rest Position View—1:2 Magnification

In this photograph, the patient is asked to wet his or her lips and let them fall

open (Figure 2 [View Figure](#)). The mandible should appear loose and relaxed. This view allows the clinician to see how much of the anterior teeth are showing at rest. Adequate lip support is shown as well as lip shape.

#### **“E” Position View—1:2 Magnification**

The central incisors are the focus (Figure 3 [View Figure](#)). The patient is asked to say “E,” which shows how much tooth structure is revealed when words are pronounced. This view should include the corners of the mouth, and the patient should exhibit a full, natural smile.

#### **Tip Down View—1:2 Magnification**

This photograph is taken with the patient’s head tipped down and a full smile visible (Figure 4 [View Figure](#)). In the frame, the tip of the nose should be seen. This view shows where the teeth fall in relationship to the patient’s lip.

#### **Profile Smile—1:2 Magnification**

The patient’s head is turned to the side and the condyle should be in the center of the photograph. The patient should be smiling.

#### **Upper Arch: Occlusal View—1:2 Magnification**

The upper arch occlusal view always is taken as a reflected view using a high-quality mirror (Figure 5 [View Figure](#)). The lips and cheeks should be retracted for all the gingiva to be seen in the arch. The distal of the second molars should be in the frame.

#### **Lower Arch: Occlusal View—1:2 Magnification**

The occlusal view also is taken as a reflected view using a high-quality mirror (Figure 6 [View Figure](#)). The lips and cheeks should be retracted for all the gingiva to be seen in the arch and the distal of the second molars should be in the frame.

#### **Close-up Centered—1:1 (No Magnification)**

The upper or lower arch (whichever arch is being treated) should be center in this view. All teeth and gingiva should be seen, with no lips or retractors visible.

#### **Right and Left Lateral Views—1:1 (No Magnification)**

These lateral views are made with the lateral incisor as the focal point and center of the images. Again, all teeth and gingiva should be seen, with no lips or retractors visible.

#### **Upper and Lower Teeth: Retracted Frontal View—1: 2 Magnification**

The upper and lower teeth should be parted slightly so the incisal edges are visible (Figure 7 [View Figure](#)). A minimum of the retractors should be visible and the lips should not approach the frame. The maxillary central incisors are the focal point of this image. The camera lens should be parallel to the plane of occlusion.

#### **Upper and Lower Teeth: Retracted Right and Left Lateral Views—1:2 Magnification**

The upper and lower teeth should be parted slightly so the incisal edges are visible (Figure 8 [View Figure](#)). The right and left laterals are the focal point in these frames. A minimum of the retractors should be visible and the lips should not be in the frame.

#### **Upper and Lower Teeth: Retracted Bite Together Frontal View—1:2 Magnification**

A minimum of the retractors should be visible and the lips should not approach the frame (Figure 9 [View Figure](#)). The patient is asked to bite together and hold. The maxillary central incisors are the focal point of this image. The camera lens should be parallel to the plane of occlusion.

#### **Upper and Lower Teeth: Retracted Right and Left Lateral Bite Together Views—1:2 Magnification**

The right and left laterals are the focal point of these images. The camera lens should be parallel to the plane of occlusion to avoid the appearance of occlusal plane discrepancies, which may not be present.

#### **Conclusion**

The Dawson Philosophy emphasizes that every diagnostic or treatment decision should be made on the basis of understanding the reasons for the problem. Digital photography plays a vital role in this process.

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**FIGURE 1A** Right lateral view.



**FIGURE 1B** Left lateral view.



**FIGURE 2** Rest position view.



**FIGURE 3** "E" position view.



**FIGURE 4** Tip down view.



**FIGURE 5** Upper arch: occlusal view.



**FIGURE 6** Lower arch: occlusal view.



**FIGURE 7** Upper and lower teeth:  
retracted frontal view.



**FIGURE 8** Upper and lower teeth:  
retracted right lateral view.



**FIGURE 9** Upper and lower teeth:  
retracted bite together frontal view.

#### **About the Author**

**Shannon Pace Schmidt, DA II**  
Faculty, The Dawson Academy,  
St. Petersburg, Florida

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