

The Role of Visuals in Medical Education

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As a medical illustrator I happen to think visuals are pretty important in medical education - education of yourself, your peers, and your patients.

You may be a brilliant clinician and superb surgeon, but if you can't communicate effectively with your patients, or if your fellow physicians have problems understanding your papers, then you could be doing your practice a disservice.

First of all, I'm going to assume you're a brilliant writer - a real wordsmith. However, studies have proven that repetition increases retention of information. So repeat your message by using images. Images are obvious attention-getters, dramatically increasing comprehension of information.

Who Are You Talking To?

Consider who your audience is. If it's an orthopedic surgeon he or she is in a rush. They are used to being bombarded with visual images at the speed of a video game. They know the visual shorthand of icons and they will want to quickly scan, absorb and understand information. No one has much patience for deciphering a labyrinth of text.

If you're writing for your patients, sentences should be short and word syllable count low. Write to a 4th to 7th grade level. Studies have shown that visuals used in patient education can increase treatment compliance and patient satisfaction, and can decrease the time needed to explain diseases and treatments.

Illustrations vs. Photographs

Enamored with the bells and whistles of your digital camera and want to supplement your text with photos? Hey, I can't compete with photo-realism but maybe that's not the best use of your new toy. If a once-in-a-lifetime clinical case presents itself, then by all means snap away.

However, just be aware of this: Photographs show everything and unless you are a whiz at Photoshop® you'll probably include a lot of distracting details which take away from your message.

An illustration can eliminate peripheral minutia and zero in on the most critical steps in a procedure. A drawing will also represent the normal case presentation that will be encountered. Let's say the patient you photograph has an exceptionally large femoral head or an atypical nerve branching pattern. This may mislead your reader into believing that that's what they'll always encounter during your procedure.

Do It yourself; Use Your Cousin; or Hire a Professional?

If all you need are some decent charts and graphs there are simple software programs which you can use yourself.

Or you may want to find a local graphic designer who has a better eye for font choice, line quality and balance of forms. This person should create for you a chart that will read well even if it gets reduced down to a single column width in a journal.

Make sure the designer knows what the publisher's requirements are for art submission before they start to layout your figures. For instance, whether to design vertically or horizontally and what file format is required. Most publishers supply this information or you can look on their website under Author Information.

When it comes to anything more complicated than charts and graphs I'm not going to recommend you use a graphic designer or your Cousin Sara who does gorgeous watercolors of the Maine Coast.

You'll spend so much time (translation, money) explaining anatomy or surgical techniques to these people that you'll drive yourself crazy. Do the professional thing and find a trained medical illustrator.

A medical illustrator will understand the medicine behind your information and be knowledgeable in instructional design. You'll pay for not just talented hands, but most importantly, someone who comprehends what you're writing about. He or she will be a valuable addition to your team.

Remember, accurate visuals are going to enhance the patient-physician bond and probably serve a loyalty building function.

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