



ITERATIONS IN EDUCATION

Improving User Experience and Education Through Co-Authoring a Widely Used Textbook in Anatomy and Physiology

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Creating a textbook involves ensuring that the content, text, and visual diagrams explain concepts well and as accurately as possible. This includes breaking the text into “bite-sized” palatable chunks that give the students the opportunity to pause, reflect on, and apply what they have learned from each section. The visuals are often just as important as the text; realistic, vibrantly-coloured three-dimensional art is integral for student learning in this subject as it helps to teach the concepts through visualization in addition to theory. The figures must teach well not only on the page, but also when projected on a classroom screen or when viewed on a mobile device. Having a consistent set of symbols, colours, and common visuals helps students transfer the information from text, to screen, to practical use. Moreover, many of the figures become the basis for animations and additional learning tools that are included online as part of the book’s package.

The scope of anatomy and physiology is broad and evolves rapidly, making it difficult for one person to be an expert in each area.

Consequently, faculty also need a textbook that can keep them up-to-date in this field and give them the tools they need to teach their students. Students today need a textbook that engages them visually and can provide easily digestible information. This means that the textbook includes a variety of online learning materials such as animations, guided tours of anatomy, interactive learning modules, and audio files that students can either do on their own or that are assignable by the instructor.

Methodology

Katja has been intimately involved in the creation of many of the animations and learning tools. She has also involved MRU students by asking them to participate in focus groups to gain feedback on the visuals and the impact they have on their learning.

On the 10th Edition:

6	Number of languages translated <i>French, Korean, Czech, Chinese, Greek, Portuguese</i>
29	Number of chapters
280	Number of supplemental online videos/animations
993	Number of figures (Most have multiple parts — between 2 and 8)
5145	Number of items in online library, with an additional 3000 questions.

“I really liked the textbook and all these new additions [to this edition] will greatly improve the book and help make studying a little easier... The flow chart/road maps will help me succeed because it is an organized map that breaks down the chapter, making it seem less difficult and complex.”

— Jennifer Kimura, student, *Bellevue College, Washington*

With each new edition, the goal is to help students engage more easily with the content and learn more effectively than with previous editions. Working on this textbook combines Dr. Hoehn’s skills from medicine, research, and educating, and allows her to contribute to the scholarship of allied health professionals. ■

Original Work

Marieb EN, Hoehn K. 2016. Human Anatomy and Physiology. 10th ed. San Francisco (CA): Pearson Education.