PRODUCT REVIEW / ÉVALUATION DE PRODUIT

Product: Visible Body

URL: https://www.visiblebody.com/teaching-anatomy/institutional-licenses

Product Description

Visible Body has created a teaching and learning platform including mobile apps for anatomy and physiology instruction. For this review I evaluated the instructor courseware and its accompanying apps: Anatomy & Physiology, Human Anatomy Atlas, Muscle Premium, and Physiology Animations. I used an iPad with the apps but they function with both iOS and Android.

Courseware

The courseware is an e-learning management system. Instructors can upload assignments or utilize ones that Visible Body has pre-made; manage grades and the class roster; add resources that students can use for the course; bulk edit assignment due dates or un-publish items; and create tests and quizzes with answer options - multiple choice, short answer, or dissection - using the accompanying apps. Visible Body also offers personalized instructor support and training, including helping you set up your course and ready-made lesson plans.

Anatomy & Physiology

Anatomy & Physiology is like a textbook for tactile learners. It includes videos, images, and 3D models which are divided into basic anatomy and physiology chapter-like units. The videos serve as the "lessons" letting the user listen to an explanation of a body system or function while watching it occur simultaneously. A transcript of the audio is included on the left side of the screen and subtitles can be added. The images function like inserts or key points in a textbook, either adding additional explanation to the larger text (videos) or augmenting the user's understanding of the subject matter.

The 3D models are highly manipulable and can be rotated for viewing from a multitude of angles. The user can select parts of the model to display its name, play a recording of the name, and provide text on the part selected. Users can also choose to make the selected part transparent or hidden to see inside, through, or behind it.

Anatomy & Physiology provides options for studying including practice quizzes, learning objectives, and questions for each unit. Users can also take notes or draw on the images and models and save them as pictures to review later. Everything can be added to a list of "favorites" for review.

Human Anatomy Atlas

Human Anatomy Atlas is half textbook and half workbook. The app has five main sections - views, quizzes, tours, favorites, and notecards. The favorites and notecard sections are study tools where you can save dissected and annotated images respectively for later use in class or for review. The tours allow you to combine chosen favorited images and can be used to make a presentation for lessons, or for making study notes. The quizzes section has premade quizzes for studying purposes or for in-class participation using the augmented reality functions. This would be an excellent way to implement the augmented reality feature, especially if it can be broadcast to a class.

Finally, the "views" section lets the student explore the body by region, system, and cross-section (like MRI or CT scan), view microanatomy, and demonstrates muscle actions. The format is similar to the 3D models in Anatomy & Physiology, in the way that you can manipulate the image (rotating it, fading structures, etc.), but it also includes information on potential pathologies of the structures. This section also has a subsection which is set up similarly to a gross anatomy lab. The student can use this as a practice tool for real dissections.

Howell-Spooner

Muscle Premium

Similar to Anatomy and Physiology, Muscle Premium is a tactile learner's textbook. Its "views" tab allows the student to explore muscle anatomy, physiology, and movement in normal and pathologized forms. This tab follows the same design and menu options as the previous apps making it straightforward for users - muscles can be explored from their muscle attachments, blood supply, or innervation. Included are videos narrated by physical therapists, professors, and chiropractors on anatomy, physiology, and pathologies of muscles and ligaments which include animated videos; these have the possibility to be used as homework or as lesson guides. Finally, Muscle Premium has the same suite of study aides as the first two apps - quizzes, notecards, and favorites. Its specific focus is on users in the health or medical field but other disciplines may find it useful (e.g., art students).

Physiology Animations

These are sample introductions to physiological and pathological phenomena. The animations have audio and subtitles. These could be used in lessons as supplementary material or as an introduction to a topic. The app has a few glitches, like the physiology tab at the bottom disappearing when you touch the pathology tab, but once those are fixed and more animations are added it could be a good teaching tool.

Purpose

Visible Body's products are for teaching and learning about human anatomy and physiology.

Cost

Annual subscriptions are available in two formats: seat license or site license. For schools and universities the seat license starts at $150(USD)/year/licensed device or $225(USD)/year/licensed device for business and government. [1] A site license gives anyone on the institution's network access to the programs, which makes it useful if you have offsite users, whereas the seat license limits the number of devices and therefore simultaneous users. Institutions can contact Visible Body for a quote. The apps can also be purchased individually through Visible Anatomy's web store via Google Play, or the iTunes App Store. Human Anatomy Atlas and Physiology & Pathology both cost $24.99(USD) while Muscle Premium and Anatomy & Physiology both cost $34.99(USD).

Intended Audience & Users

Visible Body's courseware and apps are intended for students and teachers at secondary and post-secondary levels in healthcare disciplines (e.g., medicine, nursing, physical therapy, kinesiology). However, these apps have the potential to be useful in art, biological or forensic anthropology, and even video game development – really any discipline that benefits from learning about the structure and movement of the human body.

Compatibility

The apps are compatible with Android and Apple products. The courseware and online content has compatibility issues with Internet Explorer (IE). This is stated up front. This could be an issue for organizations whose default web browser is IE.

Strengths:

- Multiple languages for the applications
- Time and cost-savings in cadaver labs as students can practice beforehand
- Normal and pathological anatomy and physiology
- Robust help center (including a responsive help team) for both instructors and students
- References from trusted sources (e.g., MedlinePlus)
- Augmented reality (fun and interesting learning tool)
- Subtitles on videos

Weaknesses:

- Only English for the courseware
- Cost may be a prohibitive factor in Canada
- Mistakenly call subtitles "closed captioning" (common mistake)
- Physiology Animations would be more useful as part of the courseware as a teaching tool

Conclusion

If you know that instructors at your institution are looking for a new teaching tool that can be used by more than just your health sciences library (art department, anthropology) you could make a business case for Visible Body products, especially if you can defray the costs between departments. Visible Body's applications, rather than its courseware, would be more in line with library goals of teaching and learning support. Overall, Visible Body courseware and its accompanying apps are a creative learning system which has the potential to benefit more than its expected audience.

Acknowledgements

References

1. Visible Body: Visible Body seat and site licenses for labs and institutions [internet]. Newton, MA: Visible Body; c2020. Seat and site licenses for labs and institutions; 2020, February 12 [cited 2020, February 12]; [about 9 screens] Available from https://www.visiblebody.com/teaching-anatomy/institutional-licenses

Statement of Competing Interests

No competing interests declared.

Brianna Howell-Spooner
B.A., MLIS
Clinical Librarian, Saskatchewan Health Authority
Saskatoon, Saskatchewan, Canada
Email:
brianna.howell-spooner@saskhealthauthority.ca