A hypertext resource for self-directed learning

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Introduction
SIU School of Medicine hosts an instructional website for introductory histology, characterized by extensively hyperlinked text, images, and videos. The site is designed to facilitate efficient self-directed learning.

You are invited to consider how similar resources could complement traditional media, especially in a problem-based curriculum.

Background
Learning resources should be appropriate to the curriculum environment in which they are used.

- Self-directed learners, when they first encounter unfamiliar subject matter, may not appreciate the value – or even the existence – of introductory concepts and vocabulary.
- But even conventional media are seldom designed for use in a self-directed, problem-based curriculum.

Conventional media (e.g., textbooks) are designed for the context of traditional courses. Textbooks introduce key concepts in a linear order, chapter by chapter. Every topic is accessible from any page. Most content is self-contained. The existence of introductory concepts and vocabulary is readily available from any point. Effective use does not depend on large files. Simple formatting avoids expensive software development.

Hyperlinks can supply cross references from any particular content location to all associated supporting concepts, with frequent pointers back to basics. Appropriately hyperlinked web pages can emulate the guidance that a personal tutor might provide.

Principal features
Guidance to introductory concepts is readily available from any point.

- Most content-specific terms are active hyperlinks.
- These abundant links offer easy access to background explanations as well as definitions and examples.
- All topics are multiply interlinked.
- On every page, thumbnails link to full-size images.

Additional features
Content is essentially self-contained.

- This site offers the scope of an introductory textbook, with about five hundred individual pages.
- Effective use does not depend on consultation of traditional resources.
- Built-in search engines provide efficient indexing.
- Interactive self-assessment exercises are incorporated.
- Content is enriched with links to appropriate external sites.

Website development
Simple formatting avoids expensive software development.

- This website was created using only the most basic features of Dreamweaver™, with original micrographs adapted in Photoshop™.
- Multiple small files are easier to manage than large files. Small, single-topic pages can load quickly.
- Multiple pages with hierarchical web organization facilitate addition and revision.
- Nevertheless, ambitious websites involve substantial resource investment.
- This resource, occupying about 0.3 GB of server memory, represents three years’ development effort. Hypertext adaptation of preexisting materials, such as handouts, should be relatively less time-intensive.

Questions?
Contact dgking@siu.edu

User comments

Your site was a godsend... I can tell you care about students. (unsolicited)

Your website has helped me tremendously! It is very coherent and well planned out. The links are fabulous.

After going through some sections of your website I realized how good the website really is. It has everything we need to know for our Histology exams and it’s very easy to navigate as well.

...such beautiful work that has made our learning a delight.

An amazing resource that I would highly recommend to all histology students.

Lots more links directed, problem based curriculum.

Your website is a wonderful resource.

...laid out beautifully. Absolutely superb!!

My $90 Patho text book doesn’t compare to your site... I have been to a lot of other anatomy / physiology sites on the web and yours simply “draws me in.”

...such beautiful work that has made our learning a delight.

An awesome site... I am charmed by the logical progression.

Probable the best resource I have yet come across this year in any subject.

Great histology reference for review.

An awesome site... I am charmed by the logical progression.

Great teaching material!

I would like to congratulate you on your wonderful site... I am sure that students around the world appreciate it immensely.

Visit this website:
http://www.siumed.edu/~dking2/index.htm

or just Google “histology”.