Out With the Old and in With the New: Transitioning From Traditional to E-learning

In this era of hashtags, tweets, Instagrams, emojis, and social media, electronic communication, particularly the Internet, is modern society’s main form of information acquisition and interaction. In fact, when polled, 69 percent of Americans say they get their news on computers or laptops and 44 percent utilize social media as their source of news coverage.1 Personally, I use Facebook not only to keep up with friends, but also to stay current on world events. In fact, Facebook is where I learned of two historic events within two days of each other: First that the Supreme Court decided to uphold the Affordable Care Act, and then that it had ruled in favor of same-sex marriage. Both events were plastered all over my newsfeed. Indeed, newspapers and magazines, at least in their physical form, are becoming a thing of the past.

This transition to electronic media appears to be permeating other aspects of life, work, and medicine as well. E-learning, or Web-based learning, in which learning is facilitated by the use of electronic media, has been a focus in education for several years. Starting from grade school, kids are using...
Web-based tools to learn to read, type, do math, perform experiments, and take assessment tests. As this generation grows and moves on to high school, college, and graduate school, incorporating e-learning into each stage of curricula will be a prerequisite to engage these students. Accommodating this new generation of learners has even begun in medical schools and residency training programs.

In particular, pathology training has been greatly influenced by e-learning modalities. At the risk of exposing my fellow residents, I would be willing to bet that most of them have not read the great anatomic pathology texts of Rosai and Sternberg in their entirety. These days, websites such as PathologyOutlines.com have quickly become an invaluable pathology reference for residents. Other websites, like the Johns Hopkins Surgical Pathology Unknown Conference, where users can test their diagnostic skills, have also partially supplanted traditional reading of texts and lecture series. E-learning has pervaded clinical pathology as well. You would be hard-pressed to find a pathology resident who
has not visited Blood Bank Guy (www.bbguy.org), the website created by Dr. Joe Chaffin. It’s a great source for residents studying transfusion medicine and contains a mixture of presentations, podcasts, and high-yield notes.

With the explosion of e-learning teaching modalities, the literature has recently been inundated with surveys and studies examining the use of Web-based tools in a variety of subspecialties and areas of medicine, including surgery, cardiology, dermatology, neurosurgery, transfusion medicine, and sonography. Some studies have compared traditional learning tools with those that include some form of e-learning, and the data demonstrate improvement in measured endpoints in the groups exposed to e-learning. Beyond benefits in information integration and improvement in objective assessments, other studies point out the benefits in time management, especially with physician work hours and busy schedules in the face of ever-changing practices and technological advances. Ruiz et al summarized the evolution and benefits of e-learning nicely in a 2006 review article: “Innovations in e-learning technologies point toward a revolution in education, allowing learning to be individualized (adaptive learning), enhancing learners’ interactions with others (collaborative learning), and transforming the role of the teacher.”

Seeing as e-learning has found its way into various facets of medicine, including pathology, I thought it would be appropriate to highlight two ways that ASCP is incorporating Web-based learning into the organization:

1. **Lab Management University (LMU)**, described as “the most practical and complete training resource in laboratory management,” is a certificate program designed to instruct and improve aptitude in laboratory management. It was developed to teach practical skills with 25 fundamental courses focusing on the six competencies of lab management: leadership, personnel management, financial management, informatics, operations, and compliance. These courses are interactive, and are geared toward laboratory professionals, pathologists, and residents in training. Since its inception in 2013, LMU has enrolled more than 5,000 participants, both nationally and internationally. Those who complete the LMU Fundamentals certificate can move on to the new LMU Advanced package, which expands into specialized areas and further solidifies competency and competence in your skills. For more information on LMU, visit www.ascp.org/lmu.

2. **ASCPedia** is a website in development that is designed for education and collaboration. It holds an extraordinary library of materials consisting of thousands of images, static and whole slides, that can be searched and used by members. Users will have several levels of access to this image bank for their personal collection, study sets, teaching tools, and presentations. However, the site will be much more than a repository of images, as the endeavor will encompass a broad scope of user features with several goals envisioned. First, creators hope to make an ASCP compendium, a living and evolving textbook, which will provide a quick source of information on each diagnosis. Second, the site will contain annotated case studies and master slide sets from leaders in the field. Third, there are plans to make the site interactive and to “gamify” materials so users can use the images to test their diagnostic skills. Fourth, the website will function as a large, multi-headed microscope with a multitude of purposes, including but not limited to education and eventually consultation, with future possibilities including automated image analysis. Fifth, there are plans to incorporate continuing medical education credits, which will benefit members tremendously. ASCPedia’s various functionalities will be demonstrated at this year’s ASCP Annual Meeting in Long Beach, Calif.
Undoubtedly, the world is becoming more digitized by the day and organizations are going to have to adapt to the learning customs of the younger generation. E-learning and Web-based applications are here to stay, and it will be exciting to see how medicine and pathology, including ASCP, evolve to keep up with the electronic needs of end users and patients.

References


Dr. Sullivan is a Transfusion Medicine Fellow in the Department of Pathology and Laboratory Medicine at Emory University School of Medicine in Atlanta.

Live Webcasts

Highlights

Chemistry & Immunochemistry
- Biomarkers in Pediatric Diabetes and Obesity
Cytology
- Diagnostic Pitfalls in Effusion
- Cytology: The Usual, the Unusual, and the Mimickers
Hematology & Coagulation
- Heart Attacks and Strokes, and How the Hematology/Coagulation Laboratory Helps
Histology
- Process Management In Anatomic Pathology
Laboratory Operations & Management
- Diagnostic Management Teams
Microbiology & Infectious Diseases
- Emerging and Re-emerging Infections 2015: The Good, the not so Good, and the Just Plain Confusing!

www.ascp.org/webcasts

Missed your session? Download the MP3 to listen whenever and wherever it’s convenient!

22 NEW! Webcasts
Pick 6 programs for one low price.