The ubiquitous use of the World Wide Web to facilitate learning has been a benefactor of change, revolutionising the way in which education can be delivered and received. This technological advancement has woven together communities of learners and permitted access to huge repositories of information while eliminating distance as an obstacle to learning (Table I).

The discipline of medicine has not been immune to these effects. In medical education they have been felt across the entire learning spectrum from medical students to seasoned practitioners. Such precepts focus on developing in the learner the principles of self directed learning, evidence-based medical practice, and teaching and evaluation of new competencies that extend beyond the traditional role of doctors as medical experts (Table II).

The speciality of obstetrics and gynaecology “The true power of the Web lies in its ability to enable a truly interactive learning environment and create communities of learners.”

**Table I: Unique characteristics of the World Wide Web**

- Connectivity
- Accessibility
- Mobility
- Provides real-time data
- Multi-media capability
- Fluid format (text, graphical, numerical)
- Infinite processing capacity
- Facilitates dynamic feedback (interactivity)

**Table II: Educational paradigms**

- Self-directed learning
- Experiential learning
- Evidence-based medicine
- Expansion of competencies beyond medical expertise
  - Information manager
  - Personal learning strategy (scholar)
  - Advocacy, communication
  - Advocate, communicator

Web-based learning tools in obstetrics and gynaecology

The use of the Internet as an educational medium has added a new dimension to the educational toolbox for both teachers and learners alike. A series of Web-based learning tools have been developed within the field of obstetrics and gynaecology. These range from simple knowledge repositories and educational organisers through to complex, interactive, consensus-building and knowledge transfer functions (Table III). Some of these tools promote educational paradigms such as self directed learning while endorsing the practice of evidence-based medicine, e.g. KOALA™ (Computerized Obstetrics and Gynecology Automated Learning Analysis) and MORE OB (Managing Obstetrical Risk Efficiently) [4–6]. The latter model has evolved to enhance the socialisation in learning by moving the learner from one-on-one interaction to an environment where learning is acquired as a ‘team’ or in communities.
Table III: Web-based learning products and tools

**Knowledge repositories**
OMNI (Organising Medical Networked Information) is a gateway to evaluated, quality Internet resources in health & medicine aimed at students, researchers, academics & practitioners in the health & medical sciences. [omni.ac.uk](http://omni.ac.uk).

Cochrane Library at [update-software.com/cochrane](http://update-software.com/cochrane)


National Guideline Clearinghouse (USA) at [www.guideion.gov](http://www.guideion.gov)

Medscape Ob/Gyn & Health, a weekly online newsletter, MedPulse. To subscribe to both visit medscape.com

[NTK Watch](http://www.ntkwatch.com) newsletter: the latest medical literature from over 2000 peer-reviewed journals. To subscribe visit [peerview-institute.org](http://peerview-institute.org)

**Knowledge management and transfer tools**
Log book and evaluation: see [inresidence.com](http://inresidence.com)

Learning portfolio & knowledge management system in obstetrics & gynaecology: KOALA™ Computerized Obstetrics and Gynecology Automated Learning Analysis at [koala-edu.com](http://koala-edu.com)

Maintenance of competencies with the Royal College of Physicians & Surgeons of Canada at [rcpsc.medical.org](http://rcpsc.medical.org)

[moreob.com/online/moreOB.jsp](http://moreob.com/online/moreOB.jsp) is a 3-year pilot project run in conjunction with the Society of Obstetricians & Gynaecologists of Canada to enhance existing knowledge of key obstetrics situations & conditions that can result in a negative outcome. Telephone +1 800 7668301 for further details.

**Interactive consensus-generating tools**
Discussion space where readers can post cases and literature for review by a group. Free at [quicktopic.com](http://quicktopic.com)

The International Federation of Gynecology and Obstetrics at [figo.org](http://figo.org) hosts online. Topics include professional subjects in upcoming meetings.

Online forums at OBGYN.net through the Ask The Expert link. Monthly topics listed where questions from patients, their family members and medical professionals are posted and answered by a specialist. Visit [OBGYN.net](http://OBGYN.net)

MDLinx contains up-to-date medical news. For access to peer-reviewed medical publications in obstetrics/gynaecology visit [mdlinx.com/ObGynLinx](http://mdlinx.com/ObGynLinx)

[thefetus.net](http://thefetus.net) is an online repository of diagnosis and management of conditions that affect the fetus.

Its online journal is dedicated to case reports of prenatal diagnoses of rare conditions.

[medscape.com/discussionsdirectory/womenshealth](http://medscape.com/discussionsdirectory/womenshealth) is an up-to-date directory of information in obstetrics/gynaecology & includes online forums for communication & sharing.

**e-Learning development resources**
[educause.edu](http://educause.edu) is a non-profit organisation focusing on the use of information technology to promote higher education. It also administers for the Internet’s .edu domain name services.

Web-based learning resource library is an online learning resource for higher education, comprising a catalogue of tools & topics related to Web-based learning.

[knowledgeability.biz/weblearning/default.htm](http://knowledgeability.biz/weblearning/default.htm)

[elearningguild.com](http://elearningguild.com) is a community of practice for designers, developers & managers of e-learning.

[cristalla.com](http://cristalla.com) develops online courses, discussion forums & resources for online learning methodology.

[catalyst.washington.edu/partner/distance.html](http://catalyst.washington.edu/partner/distance.html) is a University of Washington site that provides tips on how to design & teach online courses. Focuses on student interaction and distance learning.

[internet-university.net/what.htm](http://internet-university.net/what.htm) is a consulting & application service provider for development & implementation of online learning & Web conferencing products.

A learning portfolio is but one example of this type of educational tool that has been successfully adapted to the Web. A collection of evidence that demonstrates a personal learning strategy, it captures the continuing acquisition of knowledge, skills, attitudes, achievements and activity by an individual. In the field of obstetrics and gynaecology the KOALA™ learning portfolio was introduced into residency training in Canada in 1997. Based on the elements of Schn’s work to reinforce reflective practice and endorse enquiry-based learning it challenges the user to reflect on a patient encounter, articulate a question regarding that experience, seek out information to answer the query, evaluate the information to answer the query, evaluate the information retrieved, and incorporate learning into a personal portfolio[7]. Other examples of Web-based portfolio learning...
Web-based learning in obstetrics and gynaecology may be found within the MOCOMP (Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada) PC Diary, www.mainport.org, where participants in all 50-plus medical and surgical specialties submit online evidence of ongoing participation in accredited and personal learning activities for continuous development credits.

Finally, Web-based learning tools in obstetrics and gynaecology have emerged that enhance the social experience of learning. Information gathered is shared within a group of people with common interests, passions and goals in chat rooms, online forums, etc. The Internet assists in capturing, evaluating and distributing information; however, for further successful knowledge transfer to occur a further step is required: learning must become experiential and make a difference. This step includes the re-tooling of information into a format that permits evaluation of the pragmatic outcome of learning. In obstetrics and gynaecology this can translate into improved delivery of patient care to women and their babies. For practising clinicians the MORE OB programme is a national risk management programme run by the Society of Obstetricians and Gynaecologists of Canada that exemplifies the power of linking communities of learners together. It is a continuous professional development programme for physicians, nurses and midwives designed to improve patient safety and decrease adverse obstetric events and clinical error. The programme consists of four elements: (1) evaluation (environmental scan, self-assessment, pre- and post-tests); (2) education (core obstetric content, decision trees, management audit tools, department audits); (3) practice modification (application and review of practice modification tools); and (4) reflective learning (emergency ‘drills’, ‘near miss’ reviews, adverse events reviews). This is an example of a highly evolved use of Web-based learning, where a group of individuals can access information that is easily retrieved, of high quality, accurate and dynamic, with a discernible emphasis on patient care, and create a true community of practice within the ‘virtual’ learning environment.

The future of Web-based learning lies in its ability to exploit its connectivity to create dynamic learning communities which cross traditional professional and geographical boundaries. These communities can harness the power of group learning acquired through systematic processing and sharing of vast amounts of data, explore common themes that permit group problem solving, drive best practice and catalyse innovation. In obstetrics and gynaecology, the foundations of such communities of practice are already operational in the form of chat rooms, discussion boards, online forums (e.g. OBGYN.net, thefetus.net, MDLinx) but their true power has yet to be realised. So the question is, how can we exploit the unique characteristics of the Web (Table I) and the innovative tools developed in medicine (Table III) to address the challenge of medical education (Table II) and knowledge transfer in obstetrics and gynaecology? To answer this question is to fully appreciate and understand the potential of Web-based learning (Figure 1).

Disclosures:
References:


Source URL: http://www.obgyn.net/infertility/web-based-learning-obstetrics-and-gynaecology

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