

WebOSCE: an online tool to remotely encounter standardized patients for the practice, assessment, and remediation of clinical skills



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How to learn complex skills?

- **Knowledge** component: Study facts, learn what's known
- **Attitude** component: Observe role models, reflect on "how do they make it work"
- **Skills** component: See many, do many, receive feed-back, do again - until a certain level of competency is reached.

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Part 1: Learning the Knowledge



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What needs to be learned to understand communication in healthcare?

(IOM Report, and Academic Medicine, Vol. 79, No. 6 / June 2004 pp 495 – 507)

<p>CORE CONCEPTS</p> <ul style="list-style-type: none"> • Overview • Integrating self-reflection and self-awareness • Therapeutic Aspects of Medical Encounters • Balance, Self Care <p>ESSENTIAL ELEMENTS</p> <ul style="list-style-type: none"> • Structure and content of the interview • Builds a relationship • Opens the discussion • Gathers information • Understands the patient's perspective • Shares information • Reaches agreement • Provides closure <p>ADVANCED ELEMENTS</p> <ul style="list-style-type: none"> • Responding to strong emotions • Non-verbal and Paraverbal Aspects of Communication • Cultural Issues in the Interview • Promoting Behavior Change and Adherence • Informed Decision-Making • Exploring sexual issues • Exploring Spirituality & Religious Beliefs 	<p>COMMUNICATING IN SPECIFIC SITUATIONS</p> <ul style="list-style-type: none"> • Family Interview • The Pediatric Interview • The Adolescent Interview • The Geriatric Interview • Smoking Cessation • Diet/ Exercise • Anxiety/Panic Disorder • Depression • Domestic Violence • Alcoholism Diagnosis and Counseling • Drug Abuse Diagnosis and Counseling • Medically Unexplained Symptoms and Somatization • Advanced Directives • Giving Bad News • Terminal care • Discussing Medical Error • Terminating the Doctor/Patient Relationship <p>COMMUNICATING WITH COLLEAGUES</p> <ul style="list-style-type: none"> • The oral presentation • Communication within Health Care Teams • Talking with Impaired Colleagues • Principles of Teaching Medical Students and Residents
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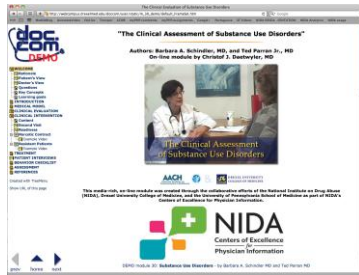
We teach with „DocCom“: 42 online modules for the teaching and learning of healthcare communication skills

- Comprehensive
- Well structured modules
- Texts by renowned experts
- Our special "annotated videos"
- On-Line learning groups
- Best for use in "blended learning settings"
- Success: 14,000 current active users, Japanese translation, others in the making

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Example: Free Module 30 on „Clinical Assessment of Substance Use Disorders“



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First results on the efficacy of DocCom:

Spagnoletti, CL, et al., **Implementation and evaluation of a web-based communication skills learning tool for training internal medicine interns in patient-doctor communication**, *Journal of Communication in Healthcare*, 01 2009, vol.15, 2/2(159-172)

"Although baseline knowledge of basic patient-doctor communication skills among interns was high, the use of four basic doc.com© modules improved interns' communication skills knowledge on multiple choice tests. Interns were satisfied with the modules as a curricular intervention."

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Part 2: Practice



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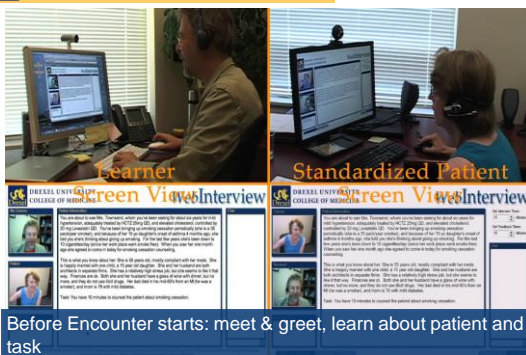
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WebOSCE is a novel online technology that:

- Remotely connects learners with Standardized Patients (SPs) at the date and time of their liking.
- Provides the learner with a task that can be performed realistically on the remote SP (e.g.: do a Smoking Cessation Counseling Session with Ms. F.)
- After which the learner is provided by the SP with objective structured, high quality, personalized feed-back, that already entails video recordings of the encounter
- In addition, the learner receives an email with 1) a link to the recording of the complete WebOSCE encounter and 2) a link to a personalized page with learning assignments to remediate deficits that were identified/

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Part 3: Assessment



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Learner **Standardized Patient**

Screen View Interview

During Encounter: Learner sees just SP, but SP sees learner and scoring matrix with color code for "good", "iffy", or "bad"

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Learner **Standardized Patient**

Screen View Interview

The feedback section: the SP talks through the scoring items list and provides feedback. The buttons on the right allow..

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Learner **Standardized Patient**

Screen View Interview

To play-back sequences from the previous encounter..

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Learner **Standardized Patient**

Screen View Interview

or example-videos in which effective skills are demonstrated..

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Medical Teacher, Vol. 24, No. 5, 2002, pp. 483-487

A pilot test of WebOSCE: a system for assessing trainees' clinical skills via teleconference

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Abstract: WebOSCE is a computer-based system that allows a student at an affiliate site to participate in a 10-minute standardized patient-based exam using a videoconferencing interface, while nine other students take the exam on-site. We pilot-tested this system during a required year-end objective structured clinical exam. We compared performance data between the 26 distance students taking the exam via WebOSCE with 221 on-site students. We also compared both student groups' responses on a post-exam questionnaire, and conducted a post-exam structured interview to elicit the Pittsburgh students' perceptions on the WebOSCE experience. Students taking the exam via WebOSCE scored significantly lower on most objective exams for physical exam and history. Methods Subjects

History: WebOSCE started as video conferencing system for the remote assessment of skills.

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Drexel University College of Medicine WebOSCE

First results on the efficacy of WebOSCE combined with DocCom:

Daetwyler CJ, Cohen DG, Gracely E, Novack DH. eLearning to enhance physician patient communication: A pilot test of "doc.com" and "WebEncounter" in teaching bad news delivery. Medical Teacher 2010; 32: e381-e390

Abstract: The purpose of this study was to evaluate the efficacy of a new eLearning system, "doc.com", in teaching bad news delivery. We found significant improvement in skills as components were added, and the training program was well received.

Methods: We found significant improvement in skills as components were added, and the training program was well received.

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Study Design

- **Phase 1:** Baseline assessment (6 weeks after the start of internship) with *WebINTERVIEW* (n = 62)
- **Phase 2:** Two interventions (3 weeks after the baseline assessment) one with “doc.com” module 33 (n = 22), the second one with an additional *WebINTERVIEW* with feed-back (n = 19)
- **Phase 3:** Final assessment (7 - 8 weeks after the baseline assessment) with *WebINTERVIEW* with feed-back (n = 57)

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Results

	Phase I (Baseline)	Phase III (final)	Mean change
Control group:			
DocCom only:	56% \pm 20%	63% \pm 14%	8 \pm 27
DocCom + WebOSCE	53% \pm 17%	68% \pm 9%	14 \pm 17
	46% \pm 20%	71% \pm 12%	27 \pm 23

The results show a great effect size, but due to small sample group size, they lost power and are not significant.

A trend analysis produced significant results: the more, the better

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Part 4: “Remediation”



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The learner receives a link to a complete recording



The clickable timeline shows the Encounter (grey) section as well as the feed-back section – and the itemized score (colors)

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Clicking on the learning assignments brings the learner exactly to the section in DocCom where this is being explained.

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Plus a page with learning assignments to remediate deficits that were identified

The Learning Circle is looping!



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THANK YOU!

Please check
out <http://webosce.net>
for more information

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